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Translated from the Danish by W. E. Galvert, revised by C. Daryll Forde

THE ESKIMOS

BY

KAJ BIRKET-SMITH

NATIONAL MUSEUM COPENHAGEN

FOREWORD BY
C. DARYLL FORDE

METHUEN & CO. LTD 36 ESSEX STREET W.C.2

First published in Denmark under the title ESKIMOERNE

This translation first published in Great Britain 1936
This new enlarged and revised edition first published 1959
© Kaj Birket-Smith 1959
Printed and bound by Butler & Tanner Ltd, Frome
Catalogue Number 6136/U

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Foreword

THE Eskimo are probably the most widely known of the world's primitive peoples. The mere fact of their continued survival with a distinctive culture in an arctic environment has long evoked wonder and interest. Every child knows something of the successful adaptation of Eskimos to a world of snow and sca-ice and tundra. But this superficial acquaintance may even hinder recognition of the complex variations on a common cultural theme that have developed over a thousand years among the many small Eskimo communities that have extended along the Arctic coastlands from the Bering Sea to Greenland. For the capacity of the Eskimo to sustain, under these conditions and with such limited resources, a continuing but diversified cultural tradition provides one of the most striking demonstrations of the workings of those recurrent processes of invention and diffusion, of adjustment and integration through which all peoples at once maintain and modify their way of life, creating an ever-changing cultural pattern that they regard as essentially their own.

Eskimo language and crafts, mythology and art have spread over thousands of miles of arctic littoral and hinterland. Many of their various techniques and items of equipment have been traced back by ethnological and archaeological researches to successive developments and diffusions from diverse sources extending over many centuries.

The comparative isolation of the Eskimo and the relative simplicity and stability of their culture over wide areas and long periods of time enable us to see, as it were in bold outline and on a single stage, the universal themes of cultural development and change – the introduction of new techniques and styles, the continuous adjustment to natural conditions, the mutual adaptation of different cultural elements to form a coherent pattern and the impress of that pattern on social life and ultimate values.

The Scandinavian countries, as the portraits in this volume recall, have long played a prominent part in the exploration

of the Arctic regions of the New World, and the association of Greenland with the Dano-Norwegian states gave them a special interest in scientific research among the Eskimo. Rink, Nordenskiold, Amundsen and above all Rasmussen laid the foundations for Eskimo studies. Dr. Birket-Smith, the author of this book, has devoted his scientific career to them and is today the doven of Danish Eskimologists. He first visited Greenland as a member of a zoological expedition when only 19 years old. He made a detailed study of a West Greenland community in 1918 and in 1921 himself accompanied Rasmussen on his overland journey by dog team across the Canadian Arctic to the Bering Strait. He spent two years travelling from band to band among the inland Eskimo and Indians west of Hudson Bay and later carried out ethnographic researches in Alaska. In close touch throughout his career with his Canadian and American as well as other Scandinavian colleagues, he has been intimately associated with the development of Eskimo studies in all its branches for over half a century.

It is this uniquely extensive knowledge which gives Dr. Birket-Smith's book a special value. For although there are many popular accounts of some aspects of Eskimo life, this work stands alone as a short but comprehensive and scholarly account of the character and development of Eskimo culture. As a glance at the bibliography will show, the scientific literature of Eskimo research is vast, but it is for the most part highly specialized and scattered through a multitude of books and periodicals in several languages. In this revised edition in English translation of his 'Eskimoerne' he has been able to draw freely on these many sources as well as on his own studies and travels to provide both the anthropologist and the general reader with a simply but vividly written survey of all the main features of Eskimo life. In it the relations of equipment and means of livelihood to special features of the natural environment and the influence of both on the social life and outlook of Eskimo communities are clearly brought out.

Dr. Birket-Smith has also made important contributions to the study of the origins and development of various elements and phases of Eskimo culture. In this book he gives a masterly survey of present knowledge of prehistoric arctic cultures, clarifies the problems involved in their development and offers a synthesis of the results so far achieved which draws on a wide range of resources in archaeology, linguistics and physical anthropology. The apparently closed worlds of isolated Eskimo communities scattered thinly across Arctic North America are thus shown to be ultimately linked not only to one another but also to the whole northern world by multifarious cultural strands which often extend far into the past.

Preface to the First Edition

Oxford, the visitor is confronted with the inscription 'Manners Makyth Man'. In this book I have tried to give a picture of Man as he appears when subject to the severest test to which he has ever been put – in the long and dark winter night when the thermometer falls to 50° and 60° below zero, or on the ice-filled and stormy sea pursuing the monsters of the deep in a fragile skin-boat. First I have sketched him as Man, his physical characteristics and racial affinities, although the latter involve several problems still unsolved. I have then described him as 'Manners Makyth' him, as an Eskimo, with a speech, a way of life and a social setting all his own. And finally I have taken the liberty of stating my opinion of how this remarkable culture sprang into existence, and what its connexions are with other types of culture.

It has been my good fortune to have acquired a personal knowledge not only of the more or less civilized Eskimos of Greenland and Alaska, but also of the roaming tribes of the Canadian Arctic, who were still in all essentials uninfluenced by White Men when I knew them a little more than ten years ago. I travelled with them, taking part in their weird incantations, sleeping among them in their snow-huts, and even starving with them sometimes – in short, living as an Eskimo myself for nearly two years. In writing this book I have also drawn freely on all literary sources available to me, and while the book has a scientific foundation, my goal has been to write in such a way that I can be understood by anybody.

The Danish edition of this book appeared in 1927, but I need hardly say that additions and corrections made necessary by investigations since then have been made to the best of my ability. In conclusion I wish to express my thanks to the Rask-Ørsted Foundation of the Danish Government which has defrayed the expenses of translation, to Mr D. Jenness of the National Museum of Canada, and to Professor C. Daryll Forde of the University of Wales, for their valuable assistance and

suggestions. But there is one whom my words can reach no more: Knud Rasmussen, the great explorer and the faithful friend – he who understood the Eskimos better than anybody else; however, if he can hear the voice of my heart, he will know that my gratitude towards him will never diminish.

KAJ BIRKET-SMITH

GOPENHAGEN

January 1935

Preface to the Second Edition

TORE than twenty long and eventful years have passed since the first English edition of this book, and have made numerous emendations and additions necessary, for Eskimo research has not been at a standstill in the meantime. It is true that two of my old friends have more or less given up Eskimology. Dr Diamond Jenness has retired from the National Museum of Canada, while Dr Therkel Mathiassen now occupies himself almost exclusively with Danish prehistory. On the other hand many younger friends and colleagues have taken up the task: Dr Frederica de Laguna, Dr Henry B. Collins, Dr Froelich G. Rainey, Professor W. S. Laughlin, Dr J. L. Giddings, and in Denmark Dr Helge Larsen, Professor Erik Holtved, Count Eigil Knuth, Mr Jörgen Meldgaard, etc. Now that I can hardly take part in Eskimo field research any more, it is highly gratifying to know that in the future it will rest in such good hands.

I owe a special debt of gratitude to Dr Rainey for informing me of the latest radiocarbon datings of certain Alaskan finds, and to Professor J. van Stone, who has given me some important details concerning the present status of the Alaskan Eskimos.

KAJ BIRKET-SMITH

GOPENHAGEN

January 1958

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^{*} From a photograph by the Author

^{† &}quot; " " Leo Hansen

^{‡ &}quot; " Knud Rasmussen

Introductory

Tr gave us all a start when we suddenly realized that the dogs had scented something that to us was hidden in the failing light.

Slowly, all too slowly, the heavily laden sledges had glided out of the night-like darkness of the Arctic forenoon, through the few, pale hours of daylight, and were now again about to be swallowed up in the twilight which was gathering over the ice. We had arrived at the stage where limbs move forward mechanically, while one's thoughts wander and conjure up visions of a snow-hut, a hissing primus stove, and tobacco. The iron shoes of the sledges whistled in the bone-dry snow. It sounded just as if they were being drawn through sand, and they seemed as heavy. It is a sound that gets on your nerves and wears out the spirits of the dogs, for it is synonymous with hard labour and little progress. But this was before we had learnt from the Canadian Eskimos to fit the runners with that marvellous, iceclad mud shoeing which eliminates almost all friction. These were the very people we had set out to find . . . and then it was that the unexpected happened.

Up into the wind a dog raised his snout, nostrils aquiver; in the same second an electric current seemed to shoot through the whole team, which rushed off at a wild gallop. And the other team after it!

The sledges swung and jerked, and it was difficult to keep them from capsizing on the uneven ice. Close in on our right we had all day followed the low, rocky coast, black and white, naked, ice-smoothed primitive rock and dazzling snow in monotonous repetition. Through the ramparts of close packed ice at its foot the dogs now sped, and over there, just above the edge of the beach, stood a small white dome, in the shelter of the rock wall behind.

It was a snow-hut.

Quickly the dogs were forced to one side, before they could rush right into the house. With some trouble they were stopped and their excitement quieted. A six-yard whiplash, unrolling

2

with a little crack and, apparently accidentally, flicking the snow an inch in front of an impertinent nose end, has a profoundly calming effect. A pair of covetous eyes gazes in the forbidden direction, a tongue hanging out of gasping jaws – then the dog curls himself up resignedly and buries his nose in his bushy tail, to steal a few minutes' rest after the break-neck rush.

Meanwhile we walked up to the snow-hut. Unfortunately it was deserted; that was obvious enough even from a distance. No strange dogs had flown out at our own team, no fur-clad figures had emerged in the snow, and the hut stood cold and still; no gentle gleam of the lamp made its way through the icepane, whispering of warmth and bubbling cooking-pots filled with caribou meat inside. But this was the first trace we had found of the people among whom we were to spend the next two years, and the only snow-huts we had hitherto known were those which our own Polar Eskimos had built.

The hut was quite empty. There was nothing but the naked. white dome curving above us when we crept inside. A wandering people had lived here and had left the spot again, taking everything with them. Here, where we others only come after the newspapers at home have published numerous and long leavetaking articles, to the accompaniment of the unspoken anxiety of family and friends and the head-shaking of 'sensible' people, is the scene of their everyday life, a continuous series of polar expeditions which last not a year or two, but from birth to the grave. With a harpoon, to catch the seal when it comes to its breathing hole in the ice; with a broad-bladed knife of caribou antler, to build the snow-hut; with a flat soapstone dish filled with blubber, burning with merrily bobbing flames along its rim - thus they get their food, their shelter and their heat. Thus flourishes a care-free oasis in the centre of the snow-clad wastes which lie, as it were, just outside the backdoor of mankind, far to the north of the lands where the forests provide less inhospitable conditions of life.

It was easy to see the direction taken by the former occupants of the deserted hut. Innumerable impressions of dog paws and, in the middle of this confusion, two parallel furrows – much broader and closer together than the tracks left behind by our Greenland sledge runners – spoke a language that could not be misunderstood. Could we overtake them? The tracks were not

yet frozen. The inhabitants must have left the hut the same day, perhaps only a few hours before our arrival. As darkness descended we again guided the sledges out over the ice.

The low coast retreated from us in a big swing and disappeared from our sight; but we had the tracks to follow and the dogs were as eager as we were. At first it was not difficult, but gradually the darkness increased in intensity. There was no moon, only a twinkling vault of stars, with here and there a few flickering draperies of northern lights, and about us lay the white surface of the ice, swallowed up on all sides by the darkness. The trail became more and more difficult to see in the uncertain light. Sometimes it disappeared, but we found it again. Finally, however, we got away from it altogether, and had to reconcile ourselves to the thought that on this stage, at any rate, we had not caught up with those we sought.

It was the middle of December, and bitterly cold with more than 40° centigrade of frost. We searched in vain for snow to build a hut for the night; out here on the open bay the ice was swept almost clean by the steady north-west wind that in winter blows incessantly over these regions. So we let the dogs loose and set the sledges up on edge at right angles to a big block of ice, and thus made a sheltered corner where the primus could burn. Then we crept into our sleeping-bags and drew the flap over so that only a tiny breathing hole was left. Some feet below us was the deep, black water, and now and then we heard a sobbing and sighing when, out in the darkness, it bent its back against the ice and piled it up into ramparts and barricades.

But high above us twinkled myriads of stars, and among them shone the 'heavenly caribou', peering with thousandyear-old calm towards the east whence the first grey gleam of dawn was to glide out over the desert land of the polar people. . . .

Another picture, but not of winter, nor of Canada's Arctic snowfields, but of summer by the broken, rocky coast of Greenland, where it projects into the storm-whipped, open Atlantic. It is forty-five years since this incident occurred, and yet to me it is still vivid, perhaps because it was the first time I really experienced the life of the Eskimos.

¹ Charles's Wain. (The Eskimo name for Charles's Wain is 'the caribou'.)

We had come from Denmark in the spring. South-west of Iceland we had met a gale so fierce that the ship tumbled about in the seas like a drunken man. On the following morning we had seen the wild, alpine country around Cape Farewell rise in a dazzling vision of glaciers and winter snow in the sun. Later on, we had spent the summer travelling in a motor-boat about the tremendous fjords of the south-west coast of Greenland and examining the fauna that lives hundreds of fathoms down in their green depths. We had been stopped by calfice in Kvanne Fjord, had been almost wrecked by a föhn wind off Arsuk, and in Brede Fjord we had passed day after day in Sunday-like stillness and peace, with an occasional iceberg reflecting its virgin whiteness in the silky water, whilst the land, with its fragrant, heather-clad mountain tops, lay baked through and through by the sun. And we had fought the hopeless fight of all summer travellers in the Arctic against the mosquitoes which spread like a quivering cloud everywhere.

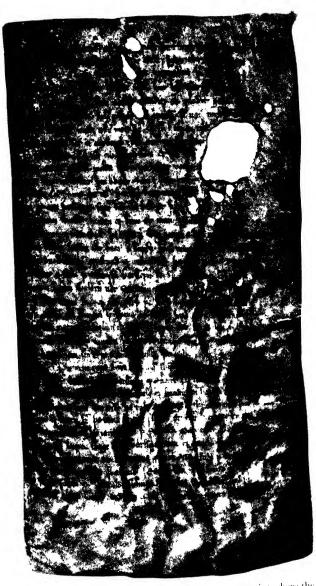
Summer was now fading fast, and the sky lay low and grey over the country. The wind beat up from the open Davis Strait and whipped icy showers over the naked islands, whilst the sea rolled heavily and lead-coloured, with white crests of foam. In a cove behind a lonely skerry settlement – a handful of turf huts scattered about among the ice-polished rocks and so low and wretched that one felt inclined to stride over them when they were in the way – our motor-boat lay tugging at the anchor-chain. It was not the weather for going to sea unless necessity called.

Then out in the fjord I saw two kayaks approaching. The dark specks appeared and disappeared again in the swelling sea; but after a while they came so close that one could clearly distinguish both the slender craft tumbling in the waves with the grace of a seal, and the men who, clad in their glistening wet, watertight skin frocks, wielded the double paddles as deftly as if it were a game. The water washed continually over the skin deck of the kayaks and the elegantly formed implements, each one in its particular place, held to the deck by stretched thongs, and ready to be seized at the proper moment. Sometimes the water washed over the paddlers themselves, but none could make its way inside the kayak. The watertight dress was laced tightly to the rim of the manhole in the deck and also round the man's wrists and face.



The first known portrait of West Greenland Eskimos, painted in Bergen, 1654

National Museum, Copenhagen



Page from the so-called Hauksbók, the earliest manuscript where the Skrelings are mentioned. The description of the encounter with the Vinland natives begins in the 9th line from top

Parelment from ab. 1390 in the University Library, Copenhagen

By this time the kayakers were close in to the beach, where the breakers roared against the rocks – and then they caught sight of me. A rapid glance to each other, but not a word. They understood. They would show this qavdlunaq what a man, a seal hunter from Qánguê, could do. And without hesitation they both began to rock their kayaks. In the midst of the skerries against which the waves flung themselves with their tons of water, making the spray hang like rain over the cliffs, these two calmly began to capsize themselves for fun! One moment the kayak lay rocking, bottom upwards, then the man came up with a jerk on the other side and the boat was again on its keel. They kept on. Time after time they turned turtle, time after time they came up again.

When at length they grew tired of the sport, both kayaks shot in towards the rocks as if they would rush right across the promontory; but at the very last moment, with an almost invisible movement of the paddle, they turned and lay-to more precisely than any baronial coachman draws up before the door. With a half-apologetic smile, because they had yielded to the temptation to show off a little, they wormed themselves out of the kayaks, put their arms in under the deck and carried them up among the rocks to where the sea could not reach them.

What had they done? Nothing, really. Simply what any seal hunter may have to go through in deadly earnest any day that the sea rises and overturns his boat, or when the harpoon line becomes ravelled and the wounded bladdernose drags him down.

The sea ice in winter and the sea itself, open, storm-whipped or basking in sunny calm in summer, are two contrasts in the life of the Eskimos. The third is the *land*. The sea has its vast expanses; but no feeling of vastness surpasses that of the tundra.

The tundra, the Barren Grounds, must be seen in spring.

The April day on which the chirping of a snow bunting suddenly broke the deathly silence of winter and brought a warm message of spring to my breast is already distant. Now, the snow is melting all around. In the hollows it is still lying, soft and knee-deep. The sledges can barely glide along and water enters at every boot seam, so that our feet are in an ice bath as we walk. But here and there black twigs of low willow

and dwarf birch stick up out of the snow, bearing small, hardy buds, and the hill-tops are already brown. Although the temperature has only now just crept above freezing point, one can see the air shimmering as on the warmest summer day. There is no time for all the snow to melt: it evaporates directly, sucked up by the dry air.

These low, undulating wastes are much more inhospitable than the mountains of Greenland; but far to the south there is access from the forests, and the fauna is therefore much more abundant. We can see from the tracks how the Arctic hare has leaped about by the bare patches and nibbled at the young shoots. Ground squirrels and lemmings emerge from their burrows in the sandy slopes and sniff at all this shimmering light. Flocks of rock ptarmigan and willow grouse flap with heavy wings over the snow and settle, twenty, fifty, a hundred together, and fill the air with their calling. Caribou tracks are everywhere, and every moment it is almost impossible to check the dogs, despite their heavy load. When the caribou are to windward it is sometimes possible to get quite close to them. Small herds can always be seen in the distance. In an endless, multilegged row their dark forms stand out on the ridge against the clear sky. The Glacial Period, Palaeolithic art, Font-de-Gaume and Altamira . . . ! The thought comes like a flash of lightning and will not be put aside.

Spring in the Arctic is but a short transitional period. Day by day as the snow disappears, summer imperceptibly arrives. Very soon there are only patches of snow here and there at the foot of the northern slopes of the moraine hills. Then in the still evenings I again see the picture of the Ice Age before me. This is the great melting period itself, when the land ice retreated from the plains of France and North Germany and left them naked. The smell of the wet earth foretells its eagerness to give life once more. These low hills with their even rise and fall, with their heather and thick carpet of sallow reindeer moss, these saturated hollows where cotton grass and sedge grow and the peat moss lies with erect spore-cases, are they not Denmark herself, when enormous rivers from the melting glaciers wound their way through the valleys, and the herds of reindeer in summer fled to the margin of the ice in Jutland to seek respite from the mosquitoes!

This is to look the infinity of space and time in the eye.

Humility bows my head, and here from this land, where every man's song is born upon his own lips, came a dedication to the work I had accomplished and that which I hoped to be able to do:

Hai - ajâjâ - hai! Oft I wandered solitary over the wide tundra -up there in the north-In the dim summer night the land came to life around me. The ptarmigan cackled. And far, far away by a gleaming water cried a solitary loon. Hai - ajâjâ! Lonely, lonely . . . Then wept my soul for those who waited, and those who had died in the meantime.

While it is possible to give an accurate description of the Eskimos' country it is difficult to form a satisfactory conception of it. Think of a people, barely 54,000 in number - no more than the inhabitants of a small provincial town, but spread over the whole of that huge area from Greenland to the Bering Sea, from the most northerly inhabited spot on the earth to places as far south as London and Leipzig! Inevitably one asks what justifies the belief that these widely scattered tribes are one people.

From the Atlantic Ocean to the Bering Strait the Eskimos everywhere call themselves inuit, the plural of inuk, which in southern Alaska becomes juit, juk and shukët, shuk respectively and among the Siberian Eskimo jugit. The Aleuts, the kinsmen of the Eskimos, call themselves unangan, which is presumably from the same root. Inuk means person, inhabitant, owner (related to the word ine, a place); for, like so many primitive peoples, the Eskimos regard themselves as the human race par excellence, in contradistinction to all others. Only on the central part of the west coast of Greenland is the word inuit not used. Here the term used is kalâtdlit (sing. kalâleq), which may be a corruption of the Norse 'skræling'; a transformation in this direction would, at any rate, conform to the Eskimo phonetic laws.

On the other hand, they do not know the word 'Eskimo'

which was used for the first time in 1611 by Father Biard in his report on the Jesuit mission in 'New France' and is usually considered to originate from the Wabanaki Indian word eskimantsik, meaning raw-meat-eaters. Among the Cree south of Hudson Bay I have heard the form eskimau, plural eskīmawok, which has the same connotation. That the word has been absorbed into French from one or other of the north-eastern Algonkian dialects is therefore probable. The derivation of the word Aleut is less certain; but the Chukchi have a word aliuit, islander, which was possibly mistakenly applied by the Russians to the population of the newly discovered island chain, whereas it doubtless actually referred to the Eskimos on the small islands in the Bering Strait.

A common speech is one of the strongest human bonds, and it is above all their common language which unites the Eskimos. Both inuit and eskimawok are terms which, strictly speaking, only apply to those who speak the Eskimo tongue. The various dialects along the whole stretch from Greenland to Alaska are so similar, that their relation is obvious, both to the Eskimos themselves and to the most superficial outside observer. The position of Aleut is somewhat different, for there is a considerable difference between it and Eskimo proper. But the distinctions lie rather in vocabulary than in grammar. The first attempt to prove scientifically a relationship between the Aleut and Greenland tongues was that of the great Danish linguist Rasmus Rask, but his short treatise was not published until almost a hundred years after it was written. Doubt has since been raised, especially by Buschmann, whether any relationship exists; but all modern authorities acknowledge it, and regard the Aleut language as a separate branch of the Eskimo stock.

It is not the language, however, that is to be particularly dealt with here; and it should not, of course, be taken for granted that the linguistic unity of the Eskimos corresponds to a unity of physical type and culture. It will be seen later, however, that on the whole this is the case. In the east the Eskimo tongue, race-type and culture are closely correlated. Towards the west, on the other hand, the boundaries are more blurred; for the characteristic Eskimo race-stamp becomes somewhat effaced in Alaska, while some elements of the culture have spread to foreign peoples, so that we find it absorbed by the

Coast Chukchi and Coast Koryak in Asia, and to a considerable degree by the Ingalik or Kaiyuhkhotana Indians of the lower Yukon, as well as by the Tanaina and Eyak of Cook Inlet and the Copper River delta respectively.

In the following pages, however, we will confine ourselves to the Eskimos in the proper sense of the word, i.e. those tribes which speak Eskimauan or 'Esk-Aleutian' (Eskimo-Aleut) languages. It is their life and, as far as it can be recovered, their history that are to be described in these pages. That the description at no place claims to be complete need scarcely be added.

CHAPTER I

The Country: its Discovery and Culture-Conditions

Strait, which cuts through the former bridge between the Chukchi Peninsula and Alaska, and the wider gap between America and Europe.

A mediterranean sea has sometimes played an important part in the history of culture by providing easy and free intercourse between peoples, and by opening up new paths for the diffusion of culture. It is not only the classic lands round the original 'Mediterranean' that provide evidence of this. In the Middle Ages both the Danish Baltic sovereignty under the Valdemars and the power of the Hanseatic cities were largely due to the geographical conditions.

But when a mediterranean sea becomes an interminable field of ice, which in summer alone is converted along its shores into a water filled with drift-ice, its importance in the propagation of culture in most cases ceases. Only in the present days of aviation are conditions beginning to change. All the Eurasiatic polar people have arranged their lives more or less independently of the sea. When in summer they move out on to the tundra, it is not to seek the sea itself, but in order that their herds of reindeer may, in the vicinity of the cool coast, escape from the mosquito-hell of the boreal forests. But with the American polar people, the Eskimos, it is otherwise. More than any other race their material existence has been developed independent of forest and other vegetation. The desolate lands by the Arctic Sea are their home; under trees most of them feel unsafe and out of their element. The sea is the vital condition for the Eskimo culture proper, not by reason of possibilities of

intercourse, but on account of the plentiful animal life that lives in its waters.

And yet the Eskimos, despite the remote situation of their native land and its severe natural conditions, were the first of the tribes of the New World and also, after the Lapps, the first polar people to be encountered by Europeans.

In the long history of mankind America was originally not the far west, but rather the extreme east, and the Atlantic Ocean was the yawning gap. In the first peopling of the world America was a sort of peninsula to Asia, and Greenland again a kind of peninsula to the rest of America, joined to the Arctic Archipelago by Smith Sound. But on the other hand while Greenland, the extreme eastern outpost of the Eskimo region, lies isolated and hidden away from culture impulses, its American isolation is compensated by an approach to Europe itself. Retiring from the one it established links in another direction. Barely 300 miles from the east coast of Greenland, Iceland emerges from the sea; then follow the Faroe Islands and, lastly, northern Europe. It is this series of stepping stones which, one by one, led the Norse sailor-stock over the open sea. If the United States nowadays are the most Europeanized part of the New World, Greenland, by virtue of its situation, its nature and its history, has been both the most European in flora and fauna and also the scene of by far the oldest European settlement.

It is well known that at the height of the Viking period, the situation of Greenland led to Norsemen setting foot on its coast. In the ninth century a powerful desire to expand seized the Scandinavian peoples, who in a brief period founded a number of kingdoms from Ireland and Normandy to the heart of Russia, made their way to the White Sea and to Constantinople, and, when Norway was gathered into one kingdom and the wave of immigration lessened in the south, occupied Iceland. Almost simultaneously, the first uncertain knowledge of Greenland was acquired when Gunnbjörn Ulfsson, in about the year 875 – as the Landnámabók tells us – was 'blown by the gale to the west past Iceland and found Gunnbjörn's Skerries'.

After the comparatively quiet tenth century the flames of adventure blazed up anew. In the south, England was forced to her knees, and in the north the road was found to Greenland and Vínland. The Icelandic peasant Erik Thorvaldsson, surnamed the Red, was in 982, or 983, outlawed for three years for



Hans Egede (1686-1758), through whose selfless work in Greenland the civilization of the Eskimos started



H. Rink (1819-93), the founder of scientific eskimology and an untiring spokesman of the welfare of the Greenland population



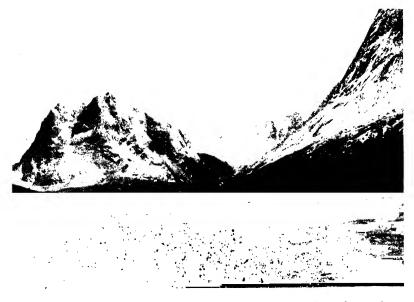
I. Veniaminov (1797-1879) 'the Apostle of the Alcut' and the foremost expert on their language and culture



Knud Rasmussen (1879–1933), born in Greenland and more familiar than anybody else with all Eskimo tribes from Greenland to Bering Straits



The best preserved Norse ruin in Greenland. The church at Qaqortoq, dating from the first half of the twelfth century



Scenery in the Eastern Settlement. The Tasermiutsiaq valley, where ruins of one of the Norse monasteries are found

homicide and decided to seek the country which Gunnbjörn had seen. When examining the south-westerly fjords of Greenland for the purpose of setting up a new home, he found 'both east and west on the land traces of dwellings and fragments of boats and worked stone objects', as his learned countryman Ari relates a hundred and fifty years later in his *Islendingabók*. It is thus established that the Eskimos had already then reached Greenland, though perhaps only in small numbers.

The first actual encounter with Eskimos seems to have occurred on the continent of America. In the saga of Erik the Red, in which Thorfinn Karlsefni's voyage to Vínland (1003-6) is described, it is related that the Norsemen met 'Skrælings' in Markland, which possibly corresponds to the wooded southeast corner of Labrador. Although nothing can be said with complete certainty, there is great probability that these Skrælings were Eskimos. The four words of their language preserved in the saga may at any rate be interpreted as being Eskimo. We are on much more uncertain ground with regard to the Skrælings who visited Thorfinn's winter settlement, Hóp, farther to the south in what he thought to be Vinland. If Hop, as there are reasons to believe, lay in northern Newfoundland, there is nothing to argue against the assumption that these Skrælings were Eskimos, too; but although the Norsemen had relations with them on three occasions, at first peaceful and later on hostile, the description is written in extremely vague and ambiguous terms.

There was no actual Norse settling in Vínland. On the other hand, Erik the Red was the instigator of what grew to be a widespread colonization of Greenland, to which, according to the ancient authorities, he gave its name, saying 'that men would be ready to go thither if the land had a good name'. The Landnam men settled in two districts, the Eastern and the Western Settlements, which lay around Julianchaab Bay and Godthaab Fjord repectively. These regions, with their ramifying net of fjords and comparatively wide stretches of ice-free land, clad in what is for Greenland a luxuriant vegetation, presented the best of conditions for fishers and cattle breeders like the Norsemen.

¹ Probably it was not the Vínland found by Leif Eriksson a few years before. The location of Leif's Vínland is very uncertain but may have lain somewhere on the New England coast.

The luxuriance which may impress the summer traveller at certain places in these districts must not, however, be allowed to mislead him. It was a stern and Spartan life our kinsmen had to face in this country, where even the hardy barley does not ripen. In summer they made long excursions northwards along the west coast to salve driftwood – a precious commodity in that woodless country – and to hunt the seal and whale; their hunting grounds probably stretched as far north as Disko Bay. But these Norsemen travelled even farther. Right up in the vicinity of the present trading post of Upernavik, close to a pair of cairns, has been found a little runic stone which, judging from the inscription, must date from about 1300.

These hunting trips must have been of particular importance in the discovery of the Greenland Eskimos. Indeed, it is not quite out of the question that the Norsemen met Eskimos on the east coast of Greenland almost simultaneously with the discovery of Vínland. The Flóamanna Saga, though admittedly a less reliable authority, relates how Thorgills Orrabeinsfostri, while on a long journey on the coast of East Greenland, 1001-5, saw two 'troll wives', which may mean Eskimo women. There can be little doubt that it was on their hunting trips that they learned to know the Skrælings, possibly some time in the twelfth century. About a hundred years after Ari, the anonymous writer of the so-called Historia Norvegia, wrote: 'On the other side, north of the Greenlanders [i.e. the Norsemen in Greenland], hunters have found some very little people, whom they call Skrælings, and who, when they are wounded with weapons while alive, die without loss of blood, but whose blood, when they are dead, will not cease to flow. But they entirely lack iron and use whale [i.e. narwhal or walrus] teeth for arrow heads and sharp stone for knives.'

There is interesting evidence of quite another kind of the Norsemen's intercourse with the Eskimos in the Middle Ages. In Bergen, the great port for Greenland, excavations on a house-site have brought to light a small walrus figure which is undoubtedly Eskimo work. As far as can be ascertained, this was found much lower down than a burnt layer underlying the remains of the fire in 1413. It may therefore very well date from the twelfth or thirteenth century. There is also abundant evidence of Norse influence on Eskimo culture in Greenland. In the lower layers of the excavations at Inugsuk, Upernavik Dis-

trict, which date from the beginning of the thirteenth to the fifteenth century, there were both imported Norse goods (e.g. a piece of woven cloth and a draught piece) and objects showing adoption of Norse ideas such as coopered vessels, saws, knives with an iron edge, screws on the tang of arrow heads, etc. Objects of Norse origin, e.g. a piece of chain-mail, have even been found as far north as in Inglefield Land about Lat. 79° N. and goo miles north of the Western Settlement; whether they were brought there by the Norsemen themselves or by trade is, however, uncertain.

After this first contact the Norsemen appear to have met the Skrælings on many occasions and they are mentioned now and then; but on the whole the Icelandic sagas are remarkably silent about them. Even the famous Konungs Skuggsjá ('The King's Mirror'), dating from about 1250 and containing much information about Greenland, has nothing to say on the subject. In fact, it is only with the awakening European renaissance that we find writers such as Scandinavia's first cartographer, Claudius Clavus (born in Salling on the island of Fyn on September 14th, 1388, two hours before sunrise, as he himself records with great concern for his own worth), and a hundred years later the Swedish archbishop Olaus Magnus, taking an interest in these strange people and giving us the earliest though undoubtedly rather confused particulars of their ethnography. But by this time they are no longer the 'Skrælings' of a hardy peasant stock; to the classically trained humanists they have become 'pigmies', decorously presented in Latin and with reminiscences of Homer and Herodotus between the lines. The Eskimos have been captured by literature.

An involved and still obscure tragedy is attached to the advance of the Eskimos in Greenland and the doom of the Norsemen. It is generally assumed that about the middle of the fourteenth century the Western Settlement was destroyed by Eskimos who came down from the north. Ivar Barðarsson, who was steward of the episcopal residence at Garðar at that time, wrote: 'Now have the Skrælings laid waste all Western Settlement. There are horses, goats, cattle, sheep, all wild, and no people, Christian or heathens.' Elsewhere, in an Icelandic record for the year 1379, we read: 'The Skrælings ravaged the Greenlanders [i.c. the Norsemen] and killed of them eighteen men and carried off two boys and made thralls of them.' If the

Western Settlement was already destroyed in the days of Ivar, this must be either a record of an attack upon Eastern Settlement or on one of the hunting parties making a trip to the north.

We know now, from Poul Nörlund's excavations on old Herjolfs Ness, that the Norsemen late in the fifteenth century were still in communication with Europe. Full-length smocks and cylindrical caps, like those we see in medieval pictures, 'tube cowls', or liripipes, like those worn by the elegant world of Paris and Burgundy in the fourteenth century, have been brought to light in a good state of preservation by Dr Nörlund's painstaking excavations in the frozen soil of this Norse cemetery in Greenland. The fashions point to so late a period that one cannot entirely reject the possibility that the last Norsemen were still living on the coast of Greenland at the time when Columbus unfurled the banner of Castile under the palms of Guanahani. These finds from Herjolfs Ness, however, tell of other things besides Paris fashions. They reveal a people who, while trying in their out-of-the-way corner of the earth to keep abreast of the times, yet lived in the utmost poverty; and the skeletal remains, which Professor Fr. C. C. Hansen has made the subject of a minute examination, show that they were a degenerate people, a handful of poorly built and surprisingly often deformed men and women, enfeebled by bad food and frequent intermarriage. It has often been thought that the last Norsemen had been merged into the victorious Eskimo nation. This is not confirmed by the Herjolfs Ness finds, which show a pure European race; on the other hand, this circumstance does not, of course, decide the question, as those members of the community who had deserted their faith and colour would naturally not have been buried in consecrated ground. In fact, it is probable that there was some mixture of blood between the two races, a mixture which, however, was only of benefit to the victorious Eskimos.

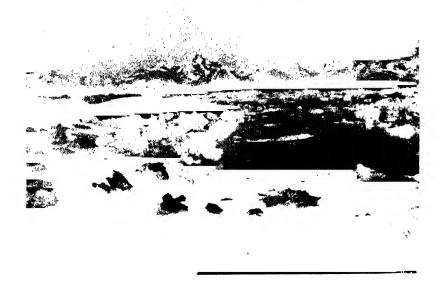
There were also other circumstances which undermined the remote Norse townships. Their populations were, of course, quite dependent upon the mother-country for grain, iron and many other necessities, and as the settlers themselves were occupied with their whaling excursions to the north in summer, supplies had to be left almost entirely in the hands of foreign sailors. Founded in a period of tremendous expansion, the townships would have had great difficulty in making ends meet when the rate of this expansion slackened off, and a general



Cape Dezhnev, the easternmost point of the Asiatic continent. Here and at Cape Chukotsk a little farther south are the only Eskimo settlements in the Old World



Sunrise in January near Kent Peninsula in the North-west Passage



The ice-filled Sermilik Fjord near Angmagssalik, the easternmost region inhabited by Eskimos



Angmagssalik women and children enjoying the summer heat in their 'house dress'

decline must have been simply fatal to them. There is no doubt that the number of ships coming to Greenland became fewer and fewer after the settlements had in 1261 voluntarily subjected themselves to the Norwegian Crown and navigation to Greenland became a royal monopoly. Besides, the demand for Greenland products did not tempt to perilous ocean voyages, as the increasing supply of Russian furs and African ivory forced the prices down. Still more serious did the situation become with the decline of Scandinavian shipping under the domination of the Hanseatic League. In 1349 the Black Death ravaged Norway and, in particular, Bergen, the home port of the Greenland merchantmen. Nor is it improbable that towards the end of the Middle Ages the climate of Greenland became somewhat more severe, and in these regions, where the European culture of that time was at its geographical limit, the slightest change, which under better conditions would not have made any mark, must have been sufficient to turn the scale. Geological investigations in the Western Settlement have shown that while the summer temperature has not changed perceptibly since the Middle Ages, the climate became less humid towards the end of the Norse occupation, and about the same time the pastures were attacked by enormous crowds of larvae of a certain butterfly (Agrotis occulta).

The final destruction of the colonies is still enveloped in obscurity. The Eskimo legends, whose reliability in this respect there is not the slightest reason to doubt, relate that the last Norsemen were killed in a fight with the Eskimos at Qaqortoq, where the best-preserved ruin of a medieval Greenland church still stands in venerable simplicity, far from the settlements of to-day. Even the names of the Norse chieftains are recalled: Ungortoq and Ulâvik, which must certainly be interpreted as Yngvar and Olaf. Whatever the facts may be, the Eskimos took possession of the whole of Greenland and when Sir Martin Frobisher landed on its coast in 1578 he met no Norsemen, only Eskimos.

The new era which Clavus and Olaus Magnus inaugurated, as far as this distant polar country is concerned, was now firmly established with new ideals and new demands. In the Mediterranean countries with their ancient commercial interests in the East the craving for new discoveries had awakened. Sofus Larsen's investigations have made it clear that in the fifteenth

century there existed a peculiar and hitherto unnoticed cooperation between Denmark, the representative of the old Scandinavian shipping traditions, and Portugal, that ambitious sea power which in Dom Enrique (called the 'Navigator') possessed a man of untiring energy and an eye of genius for the maritime possibilities of his country. Danish noblemen took part in more than one of the expeditions along the coast of Africa, and in one of the years just prior to 1474 Christian the First of Denmark sent out an expedition under Pining and Pothorst in company with two Portuguese nobles, one of whom was the elder (João Vaz) Corte-Real. Eskimos were seen when the expedition touched at Greenland, for some of Olaus Magnus' records of these people undoubtedly go back to this expedition; but it is not known whether they also met with Norsemen. The expedition continued westwards to seek new lands and actually seems to have landed on Newfoundland, twenty years before Columbus weighed anchor in Palos. Thus it is in no way improbable that they may also have encountered Eskimos on the American coast, and the same may be said of the subsequent expeditions which Giovanni Cabotto (John Cabot) and the younger brothers Corte-Real made to the same regions. The path was now marked over the ocean. As early as the sixteenth century bold fishermen were attracted from Portugal, the Basque provinces, Brittany, Normandy and England to the rich fishing banks off Newfoundland, and it can hardly be doubted that these men must occasionally have encountered Eskimos in the south of Labrador and on the north shore of the St. Lawrence Gulf, where more than a century later they were still to be found. At any rate, the founder of Quebec, that brave soldier and equally great ethnographer Samuel de Champlain, describes encounters between them and French fishermen in his work dated 1632.

The South European nations never played any great part in the conquest of these northern waters, although the elder Corte-Real took part in a Danish expedition, and the Italian Cabotto was sent out from England. While the fishermen set out for their annual gathering on the banks, the struggle to find the Northwest Passage began, the search for a northerly short cut to the spices and precious stones of the East, round the north of this difficult new world which barred the direct road across the sea. At that time the world's commerce was already slipping from

the hands of the Spaniards and Portuguese into those of the Germanic nations.

While Dutch skippers were sailing about Svalbard and the gate to the North-east Passage which was to lead them north from Europe to Arctic Asia, England took the lead towards the north-west. Frobisher's rediscovery of Greenland and its population was really only an accident, the significance of which was not even clear to him, a mere subordinate circumstance on a voyage which had for its aim the North-west Passage. When he set his course onwards from Greenland to the west, he also found Eskimos in southern Baffin Island. The subsequent English North-west Passage expeditions of Davis, Baffin, Button, Hudson and others met with Eskimos in West Greenland as far up as the present Upernavik District and on the shores of Hudson Strait and Hudson Bay.

It must not be forgotten that the Dano-Norwegian State kept up, so far as her abilities permitted, in this race of discovery and trade. Christian IV himself maintained the northern interests of his realm by his voyage around North Cape, and he sent out James Hall and Godske Lindenow to rediscover Greenland, which had never, as is often thought, been forgotten since the Middle Ages. And whilst Ove Gjedde followed the beaten track to India to found the modest Danish-Indian colonial empire, Jens Munk attempted the blind alley of the North-west Passage, where he came up against the mainland in the south-west corner of Hudson Bay, but was still able, after untold suffering, to return home with the tidings of the discovery of a great river, now called the Churchill, but known on eighteenth-century French maps as La rivière danoise. Like his contemporary voyagers to these regions, he met with Eskimos at Hudson Strait, whereas he saw none during his sojourn in the Bay.

Thus, by the beginning of the seventeenth century, knowledge had been gained of the distribution of the Eskimos, not only in West Greenland but over most of the Arctic coasts of eastern North America. After this, however, there was a halt for more than a hundred years. The principal reason for this was geographical. The waters along which Eskimos had hitherto been met with present no great difficulties to navigation in summer. At Hudson Bay, however, their limit had been reached. Only narrow, ice-filled sounds lead through a forsaken archipelago farther to the north-west, and navigation is brought to a halt by closed gulfs, where winter ice does not break up in summer. The explorer must be prepared to winter there and learn to employ an Arctic technique that was yet unknown. Before the next steps could be taken a permanent camp had to be established on shore, to study the conditions and to serve as a base for the journey itself.

On that May-day in 1670, when Charles II granted the privilege to the famous Company of Merchant Adventurers, Trading into Hudson's Bay, England acquired such a base. The Company was given sovereign rights over the whole of that vague region called Rupert's Land after the king's cousin, the Company's first governor, and comprised the country round Hudson Bay as far as the Company could operate. It was also distinctly stated that the Company was to seek the North-west Passage; but one must have a poor knowledge of the mercantile secretiveness of those days, and particularly of that ever realistic Company, to believe that it was itching to throw itself into a task which might encourage strange ships into the vicinity of its private waters. In fact there is an example to the contrary, for as recently as the middle of the eighteenth century it offered Captain Middleton a bribe of £5,000 if, instead of leading a private expedition to the North-west Passage as he was engaged to do, he would steer a course elsewhere.

It is a long journey westward to the opposite corner of the Eskimo territory, before easily navigable waters are found again. The Bering Strait is only 57 miles wide, and from the heights at Cape Dezhnev (East Cape) the opposite coast can be dimly made out in clear weather. Across these narrows there has from ancient times been intercourse between the two continents. To Asia, it is only an unimportant back-door; but to aboriginal America it was the main entrance gate of many new concepts and inventions which found their way to the most remote corners. Before Europeans came to these regions the Indians of the North-west Coast had, by bartering from tribe to tribe, received occasional iron objects from the Yakut. Both pipes and tobacco reached Alaska from Manchuria across Siberia – certainly a remarkably round-about way for so distinctively American a culture-trait as tobacco-smoking.

The first European contacts with this important link between the Old World and the New were similarly eastwards across the vast extent of the Asiatic mainland. Russian fur traders had long plied their business on the far side of the Ural Mountains when the Tatar khanate Sibir, close to the Tobolsk of the present day, fell into the hands of the Cossacks in 1579. With this began the penetration of the Russians into Northern Asia. Tremendous, navigable systems of rivers at convenient reach from one another, and a small native population incapable of putting up much resistance, eased the Russian task. In a very short time a chain of Cossack posts was thrown across the enormous mainland and, in 1639, Okhotsk was founded by the Pacific coast, sixty-four years before the first sod was turned in the building of St. Petersburg on the Baltic!

A few years more, and the Russians were looking out over the Arctic Ocean at the mouth of the Kolyma, and in 1648 the Cossack Dezhnev sailed through the Bering Strait round about the north-east point of Asia. There, and at the more southerly Cape Chukotsk, there stand to-day as many as nine settlements inhabited by Asiatic Eskimos, sometimes though not very aptly called Yuit or Namollo, and it is possible that Dezhnev may have met their ancestors. In this country, the Russians encountered unexpected and tenacious resistance from the war-like Chukchi, who for a long time barred their advance, but the discovery of north-west America was now only a question of time and waited only for naval exploration.

This brings us to the name of Peter the Great, and, in connexion with it, those of the two countries Holland and Denmark. Many nautical terms in the Russian language still bear witness of the help given by Danish naval officers in the creation of the Russian fleet, and among these officers no name is held in such honour as that of Vitus Bering. On his first expedition from Kamchatka in 1728 he discovered St. Lawrence Island, inhabited by Eskimos, and when, as the leader of his next great expedition in 1741, he again came to these waters, he reached the south coast of Alaska itself near Mount St. Elias. The German naturalist Steller, who wrote a very valuable report on the voyage, went ashore on Kayak Island and found various traces of Eskimos. Later during the same expedition, from which Bering was never to return, the Shumagin and Aleutian Islands were discovered and with them their people, who are related to the Eskimos.

The rumours of the wealth of fur-bearing animals in the newly discovered lands, in particular the numbers of the much

sought after sea-otter, seized the Russians like a fever. During the next few years Okhotsk was the scene of the fitting-out of ship after ship, wretched craft often unfit to weather the storms of the northern Pacific, and in these they battled their way from island to island in the Aleutian chain, right over to the mainland of America. *Promyshlenniki* ('traders') their crews were called, and so vigorously did they pursue their 'trade' that they left behind them a bloody trail of murder and arson, rapine and slavery wherever they went. The Aleut were almost exterminated and among those who were spared some were carried off to the big island of Kodiak, where the Eskimos, who were there called Koniag – a corruption of the Aleutian name of Kanagikh – were likewise cruelly oppressed.

Northern Alaska, however, was not sufficiently attractive to these worthy pioneers, and the discovery of the Eskimos along the shores of the Arctic Sea mostly dates from the nineteenth century, although a beginning had been made somewhat earlier. After one or two vain attempts Samuel Hearne, who was employed in the service of the Hudson's Bay Company at Churchill, had in 1770 succeeded in following a band of Indians overland to the mouth of Coppermine River, where he was an impotent witness of his companions' brutal butchery of a little body of defenceless Eskimos of that group which later on, from its extensive use of native copper for implements and weapons, received the name of the Copper Eskimos. To the far west no less a person than the great seafarer James Cook had forced his way through Bering Strait in 1778 and followed the coast some way to the north-east, and in 1789 Alexander Mackenzie, on his journey down the river which has been named after him, arrived at the mouth, and found a numerous Eskimo population.

But as yet by far the greatest part of the American coast west of Hudson Bay was hidden in darkness. At the beginning of the nineteenth century England was now mightier than ever after having crushed the power of Napoleon. Mistress of the seas, she wished to enjoy the triumph of finding the North-west Passage, even though it was of course realized by this time that it would never be of any practical importance. In 1818, therefore, John Ross made his way northwards through Smith Sound, where, although he did not complete his task, he found a small, unknown Eskimo tribe, the Polar Eskimos, who are the most northerly people in the world.

Then followed voyages and, with them, increased knowledge of the distribution of the Eskimos every few years. In the years 1821 to 1823 Parry and Lyon travelled from Repulse Bay along the east coast of the Melville Peninsula and through Fury and Hecla Strait; their descriptions of the Aivilik and Iglulik Eskimos who live there - records which supplement each other in a most admirable way - are far and away the finest of the Eskimo literature of that period. The very next year after the homecoming of that expedition, Lyon made an unsuccessful attempt to reach Repulse Bay again, and on that occasion he fell in with the inhabitants of Southampton Island, a most remarkable people in many respects who have since died out. In the next few years Franklin and Richardson made their way from the interior out to the Arctic Sea and gradually mapped the coast from Kent Peninsula to Return Reef and thereby considerably increased the knowledge of the area of the Copper and the Mackenzie Eskimos. In 1826 Point Barrow, the centre of an important group of Eskimos, was discovered on the north coast of Alaska. John Ross spent the winters of 1829 to 1833 in the region around the Magnetic North Pole and there for the first time met the big Netsilik group, whose inland kinsmen were discovered at the same time by Back.

Less than twenty years had been necessary to fill up the gap in knowledge of the distribution of the Eskimos from east to west. Naturally, great stretches were still unknown, and many expeditions, including not the least important in a geographical sense, would have to be named if we were to give a description of the general history of discovery, from the Franklin Expedition of tragic fame to the eventual conquest of the North-west Passage by Roald Amundsen in the Gjöa.

Only one great area still remained, a stretch of coast whose inaccessibility can hardly be compared with that of the Northwest Passage, it is true, but which nevertheless presents such great difficulties on account of ice that it had long been allowed to lie unexplored, and this despite the fact that, of all the regions named, it lies nearest to Europe. This is East Greenland. The 'Polar Pack', an immense mass of drift ice, is carried southwards along this coast by the polar current, and it is only at a few points and at certain times of the year that a ship can hope to slip through. But even though the land is shut out from the civilized world, its inhabitants were in communication with the

West Greenlanders round Cape Farewell, and Hans Egede had already heard of the people of the east coast. Remarkably enough, however, the first tidings of their existence had come a year or two before he heard of them, and in an unusual manner. In the year 1726 three kayak implements were washed ashore on the coast of Iceland, and were sent to the Royal Museum at Copenhagen. With a knowledge of the course of the currents in the northern Atlantic it may be accepted as being beyond doubt that these objects must have come from the east coast of Greenland, north of lat. 65° N., most likely from the region about Scoresby Sound.

Some Eastlanders had doubtless been met with in the Cape Farewell area, but curiously enough it was far to the north that they were first seen in their real homeland. When Clavering landed in 1823 on the little island which now bears his name, he found the only natives that have ever been seen in this part of Greenland, twelve people living in a seal-skin tent. They soon fled, however, frightened by the sound of a gun, and since then not a single human being has been seen on the north-east coast. The first person to make any real acquaintance with the East Greenlanders was Graah, who in 1829-30 travelled along the whole of the so-called Frederik VI Coast. It was not until half a century later that Gustav Holm succeeded in making his way farther north, and there he met a new and large Eskimo tribe in the region round Angmagssalik. This discovery not only meant that the last link was thus forged in our knowledge of the long chain of Eskimo settlements; while spending the winter there Holm wrote a wonderfully clear and comprehensive description of the life and culture of the Angmagssalik Eskimos. About the same period the great German-American ethnologist Franz Boas wrote his fundamental work on the Eskimos in Baffin Island, and these two works, the first scientific monographs on the Eskimos, mark a turning point in modern Eskimology which had been founded a few years before by Rink.

The scientific investigation of the Eskimos has since been continued in a number of valuable works, some by Boas himself (Baffin Island and the west coast of Hudson Bay), others by Murdoch (Point Barrow), Nelson (Bering Strait), Turner and Hawkes (Labrador), Stefánsson (Copper Eskimos), Jochelson (the Aleut) and, as far as Greenland is concerned, a large

number of special investigators such as Porsild, Steensby, Thalbitzer, Thomsen, and last, but not least, Knud Rasmussen. Jenness's important work among the Copper Eskimos on the Canadian Arctic Expedition 1913-18 is of the very greatest significance. The Fifth Thule Expedition under the command of Knud Rasmussen had the most important field of its operations to the north and west of Hudson Bay, and, among its other results, gave the first scientific account of the peculiar inland life, quite independent of the sea, of some small tribes in the desolate regions west of Hudson Bay which, on account of the overwhelming importance of caribou-hunting among them, are called the Caribou Eskimos. In recent years a systematic archaeological investigation has been initiated in Greenland by Therkel Mathiassen, Erik Holtved, Count Eigil Knuth a.o., and in Alaska and Canada by Collins, Frederica de Laguna, Rainey, Helge Larsen, and Meldgaard, in Siberia by Rudenko, while at the same time Hrdlička has collected considerable somatological material. Although the great American Jesup Expedition made no investigations in the Eskimo region itself, it cannot be passed over here, as its results have been fundamental to the understanding of the development of culture on both sides of the northern Pacific.

It may be added that the earliest Eskimo portrait is a water colour in the University Library of Ghent representing an 'Homme Sauvage amené des païs septentrionaux par M. Furbisher l'an 1576' made by Luke d'Heere during his exile in England 1568-77. The first great picture is an oil-painting showing four Greenlanders who in 1654 were taken to Denmark; it is now in the National Museum in Copenhagen (see plate facing p. 4).

In all the long stretch of the Arctic coast of America there are only three breaks in the span of Eskimo settlement. By far the widest is in the east, where the forest-clad southern shore of Hudson Bay penetrates the domain of the Cree and Chipewyan Indians; this gap is more apparent than real, for Baffin Island forms a bridge to the north of the bay and connects Labrador with the Melville Peninsula. The remaining two breaks are on the south coast of Alaska, where the Tanaina Indians occupy the shores of Cook Inlet, and the Eyak, at the mouth of the Copper River, have split the habitat of the Chugach Eskimos in two. To the native land of the Eskimos in America we must add the few north-eastern Asiatic settlements. In this way the

Eskimos become the only people who are common to both the Old and the New World.

The distances between the three extreme points of Eskimo territory, i.e. Bering Strait, the south-east corner of Labrador and Cape Farewell, may be estimated at over 6,000 miles each, truly imposing distances when one considers Eskimo methods of travel. And the boundaries are by no means permanent. The Asiatic Eskimos seem to have been forced back in the course of time by the Chukchi, while the most easterly tribe of the Pacific Eskimos, the so-called Tjitlgarmiut of Controller Bay and Kayak Island, have been absorbed culturally and linguistically by their Indian neighbours, the Tlingit. In Labrador we find the present boundary of the Eskimos at Hamilton Inlet; although as recently as a century ago they were visiting the northern point of Newfoundland and formerly reached as far south as Bonne Bay. In the seventeenth century they occupied the whole of the north coast of the Gulf of St. Lawrence. On the other hand, the assumption that they formerly lived in Nova Scotia or even in New England is without foundation.

The Polar boundary of Eskimo settlement cannot be more definitely delimited. No one can draw lines on a map and think that by doing so he has made a lasting division between inhabited and uninhabited areas in these regions. Here at the edge of not only the inhabited, but also the habitable world, one sequence of years means advance into unpopulated country, and another a retreat from it. An event such as a long period of famine, or an epidemic, or poisoning caused by the washed-up carcass of a whale, may render an inhabited region void. These uninhabited stretches of country are the sparse reserve capital of a poor people, and it is to them that a move is made when game grows scarce, for they are first and foremost the natural game reservations where the animals have a chance to breed in peace. Principles taken from a European agrarian culture cannot be applied in judging the living conditions of a hunting people in the naïve belief that they have sufficiency in the patch of ground on which the settlement happens at one time to stand.

It is in this light that we must view the numerous traces of Eskimo habitation in now deserted areas. Old house ruins and tent rings are to be found along the entire east coast of Greenland as far as the coast of Peary Land, where traces of the northernmost human habitation in the world has been discovered in lat. 83° 10′ N., and on the west coast far to the north of the present hunting grounds of the Polar Eskimos, along the channels which connect Baffin Bay with the Arctic Sea. In the Arctic Archipelago only the southern islands are now inhabited; but the Polar Eskimos went to Ellesmere Island for their hunting trips, the inhabitants of Baffin Island visit North Devon, and the Copper Eskimos visit Banks Land.

On Ellesmere Island, there are also remains of a much earlier period, including the most northerly known ruins of winter houses, viz. at Lake Hazen (lat. 82° N.). On the Parry Islands, too, now no longer visited by Eskimos, there are ruins. These evidences of abandoned settlements involve such a comprehensive shrinkage of area that it is difficult to explain them solely by the natural ebb and flow movement on the edge of the inhabited region. Why then are all these settlements lying deserted? No positive answer can be given. We do know, however, that in the long course of time there has been a marked uplift of the land in these regions, and, further, recent investigations in Greenland seem to confirm to some extent the early theory that climatic conditions have deteriorated. Such changes in the natural conditions were bound to have their effect upon the distribution of the Eskimos (see p. 199), but it should be observed here that the north-west corner of the archipelago seems always to have been uninhabited.

With such a wide span as that described, it is not remarkable that the regions in which the Eskimos live present a very varying scene. In the far east, Greenland, the world's biggest island, is a mountainous country whose interior is entirely buried under the inland ice, the only habitable area being a narrow strip of coast, with deep and widely ramified fjords. Baffin Island and Labrador resemble Greenland with similar high mountains, incised by deep fjords, although Labrador has great coniferous forests in the interior. The scene changes to undulating tundra and low plains, the paradise of the caribou, on both sides of the North-west Passage. In northern Alaska, flat, gently sloping coastal plains run into a shallow sea between the Mackenzie and Yukon. Finally, the land rises again, this time to the volcano-crowned and glacier-furrowed alpine chain of South Alaska that is continued in the island arc of the Aleutians.

The factor which links all these varied landscapes together into a natural whole is the climate. Arctic climate is commonly

misconceived as being restricted to the polar belt, i.e. the regions north of the Arctic Circle, where for a shorter or longer period in summer there is midnight sun and in winter a corresponding period of darkness. In the Thule District, the most northerly point at which man lives, the dark period lasts about four months it is true; but a very great part of the Eskimo region, containing the majority of the Eskimo population, lies south of the Arctic Circle. The limit of Arctic climate is not a parallel of latitude, but may be defined approximately by a line drawn through those places where the mean temperature in the warmest month is 10° C. (50° F.). Almost everywhere in the Eskimo area we find this Arctic climate with long, severe winters and short, cool summers. Tree growth is inhibited by the cold, and the eye encounters only endless moss and lichencovered tundras, barren, rocky plains, or, at best, stern heather moors and low willow thickets.

Thus not only is the habitat of the Eskimos a barren one, but, lying so far to the north, it is remote from external culture The influences which emanated from America's contacts. ancient culture centre in Mexico and Guatemala dwindle the farther north one moves, and the Arctic shores lay far outside their influence. East Asia has been of greater importance. The chains of islands which enclose the Sea of Japan, the Sea of Okhotsk and Bering Sea have formed the bridges for an ancient circumpacific culture path which passes through the western corner of the Eskimo region. A third cultural centre, the wealth of which cannot measure itself against that of East Asia or Mexico, but which has been of as much importance on account of its nearness, rose on the North Pacific coast of America. On the Alaskan Eskimos the culture of the Indians of the Northwest Coast has had a deep and fruitful influence.

But it must not be thought that such a remarkable culture as the Eskimo absorbs everything that comes along without criticism. On the contrary, there has been a close selection of what can be used and what is not suitable to its conditions. For this reason, as will be seen later, when dealing with the history of the culture, it is not the remote situation alone, but also the direction assumed by the cultural development that has resulted in a tenacious maintenance of certain very old elements which have elsewhere almost disappeared.

However, nature in the Arctic not only sets a limit to the

growth of the culture, but also demands a minimum before human occupation can begin. In these regions it is not enough to turn up with two bare hands and a good will. We may safely take it that the primeval Eskimos must have possessed a certain degree of culture on which they could build.

CHAPTER II

Outer Character and Inner Qualities

THE physical type of the Eskimo is, in general, remarkably uniform. This, of course, does not imply that they all look alike. So experienced and sober-minded an anthropologist as Jenness, who had worked in the South Seas prior to the Canadian Arctic Expedition, found types among the Copper Eskimos which, apart from skin colour, reminded him of Melanesians!1 While some give an Asiatic Mongoloid impression, others are more Indian in appearance, resembling especially certain Northern tribes like the Chipewyan, who have the characteristic 'Indian' features less strongly marked. This type has a fairly narrow oval face and a straight short nose. In many respects it is not un-European in appearance, which is probably the reason why it can be so easily overlooked as in West Greenland for instance, where it is not discernible among the numerous hybrids. The women have a more Mongoloid appearance than the men, though this is perhaps due to the fact that they are fuller in the face and more frequently show the peculiar formation of the eyelid fold which gives the eye its oblique appearance. As soon as we begin to take exact measurements, however, the underlying uniformity of the Eskimos becomes unmistakable. Only in Alaska does the extreme type fade out, as already stated, and it disappears entirely on Kodiak and the Aleutians.

Among the many popular misconceptions concerning Arctic conditions is the one that the Eskimos are a particularly short people. This is a misunderstanding which may perhaps be called venerable, for as early a writer as Claudius Clavus refers to the Greenlanders as 'small dwarves of an ell's length'. This error is the most surprising when one recalls the short stature

¹ The Negroid population in certain parts of New Guinea and on the islands to the north-east of Australia.

and often deformed growth which characterized his contemporaries among the Norsemen in Greenland. The untenability of this old assertion is demonstrated by numerous observations taken all over the region. From West Greenland we have as a result of Sören Hansen's investigations a very large number of anthropological measurements which, for stature, comprise no fewer than some 2,500 people of various ages and sex. And the result gives us a mean height of 162 cm. for men and 152 cm. for women.1 It might be objected that in this part of Greenland there has been a considerable admixture of Danish blood over a long period of time, and it can be shown as a matter of fact that the average height of persons whose father or grandfather was Danish is a little above the average for the population as a whole; but that this nevertheless does not greatly affect the general result appears from measurements taken of a number of pureblooded tribes, where the mean value for men is between 160 and 165 cm., and in Northern Alaska and the Mackenzie delta even reaches 168 and 169 cm. respectively. This is an average height which can by no means be called short. In anthropology, a race is not considered short in stature unless the mean height of the males is below 160 cm., as among the Japanese, Siamese, Lapps, etc. In most regions the average height of the Eskimos corresponds to that of the inhabitants of western France and large parts of Italy and Spain. Only in Labrador it is a little lower (158 cm.).

As a rule the Eskimos are powerfully built and plump without being fat. The trunk is comparatively long and the arms and legs short in relation to the total height. Hands and feet are small and well shaped. The breasts of quite young women are often conical, but soon begin to hang and before long resemble a pair of long, loose bags.

The head has such a characteristic form that the anthropologist who is familiar with its peculiarities can at once recognize the type. Even the Dano-French professor Jacob Winslöw (Jacques Winslow), who in 1722 described a Greenland skull (the first anthropological description of a cranium, by the way), realized its most distinctive traits.

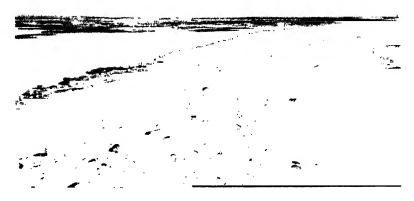
The typical Eskimo skull is large and massive. Seen from above its long and narrow shape becomes immediately obvious, while at the back there is a distinct occipital protuberance, a

tuber occipitale. Although the length of the skull is considerable, its peculiar shape follows from its relative narrowness. The socalled cephalic index, which expresses the breadth as a percentage of the length and is one of the standard criteria in physical anthropology, is in Greenland 70.7 for male skulls and 72.2 for female. When a skull has a breadth of less than 75 per cent. of its length, it is known as dolichocephalic or long-headed, whereas an index-number of over 80 is characterized as brachycephalic; the term mesocephalic is used of skulls falling between these two values. The Greenland skulls therefore are pronouncedly dolichocephalic, and only 15.5 per cent. fall within the mesocephalic and brachycephalic groups. The significance of this can be seen by the fact that in Sweden, the population of which is regarded as on the whole markedly dolichocephalic, the percentage of meso- and brachycephalic skulls has always been found to be at least twice as high.

The small number of skulls from Labrador and the Central regions of which we have measurements are in entire conformity with those from Greenland. At the Mackenzie the skull is even extremely long and narrow. It is only in Alaska that broad skulls occur in any large numbers, and the Aleut and Kodiak Eskimos are as brachycephalic as the eastern Eskimos are the reverse, the average index-number of their crania having been calculated at 83.5 and 85.9 respectively. There is, however, some difference between the eastern and the western Aleut, the latter being slightly less broad-headed than the former.

As far as our present knowledge goes, the dolichocephalic type seems everywhere to be the older of the two. Thus it has been shown that originally it was predominant on St. Lawrence Island and at Point Barrow; on Seward Peninsula a small group has even persisted to our days. Long skulls have also been reported from old sites on the Aleutians and Kodiak. This tendency towards brachycephaly has been ascribed to Indian intermixture, but that is hardly a correct explanation. Laughlin has shown that in several Eskimo groups there is an increase in brachycephaly, which may have proceeded more rapidly in the larger and older population of Alaska. Incidentally, a similar trend has been observed in both Europe and Polynesia.

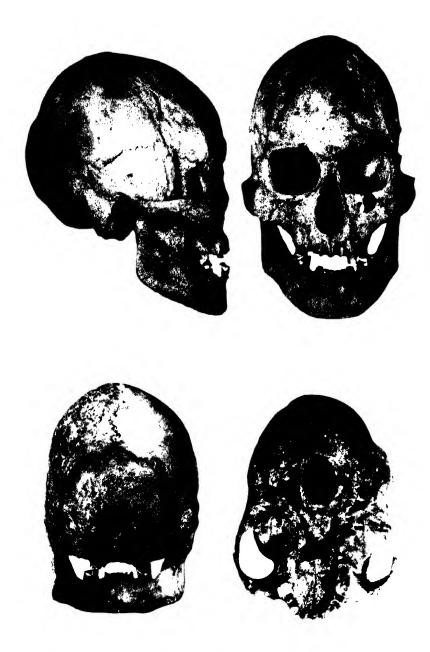
West of Bering Strait conditions are more obscure. Eskimo place-names and skulls of genuine Eskimo type from places within what is now Chukchi territory indicate that at one period



Snow melting on the Barren Grounds. A spring picture from Eskimo Point on the west coast of Hudson Bay



The village of Chenega in Prince William Sound where the Eskimos intrude into the forest region



Typical man's skull from Repulse Bay. Note sagittal crest and heavy jaw University Institute of Anthropology, Copenhagen

the Eskimos occupied a larger part of the Asiatic coast than now. A few Eskimo skulls have even been found in the interior of the Chukchi Peninsula. They may belong to a period of Eskimo advance, to roaming caribou hunters, or to Eskimo slaves in the possession of Chukchi owners. There are many possibilities, when the number of skulls is as small as it actually is. At any rate it would be premature to state, as Montandon does, that the entire peninsula was formerly occupied by Eskimos, and still more premature to proclaim them 'the rearguard of the Eskimo race', which was left there when their kinsmen crossed to America. It is quite another thing that an Eskimo racial component occurs among the Coast Chukchi and, to a smaller extent, among the Reindeer Chukchi and the Koryak.

After this disgression we can now return to the consideration of the characteristics of the typical Eskimo skull.

In contradistinction to the low brain-case of the Aleut, that of the Eskimo is fairly high. One of the most outstanding and peculiar features of the skull is, perhaps, its roof or ridge shape, and it cannot be gainsaid that this, together with the high upper temporal lines, give an 'animal' impression. Doubt has been expressed as to whether these features can be taken as being primitive. If we turn to the most primitive races of our own species, we find that a low stage of development may display itself in two entirely different ways: in some cases, as among the Australians, it takes a more or less 'brutish' character, and here in fact the skull is ridge-shaped to a considerable degree, but in other cases the primitiveness is 'infantile' rather than 'brutish', as evidenced by pygmies and pygmoids, and then there is nothing like a skull crest. In these circumstances the significance of this feature among the Eskimos is far from being clear. The theory has been advanced that the sagittal crest and the high temporal lines, as well as the compressed form of the Eskimo skull, are simply caused by the enormous development of the chewing muscles.

Almost the opposite of primitive is the spaciousness of the brain-case which, although it varies considerably, is on the whole great. In Greenland, for instance, the cranial capacity averages 1,527 c.cm. for male skulls and 1,436 c.cm. for female. Almost one-fifth have a capacity of 1,600 c.cm. or more. From the west somewhat lower average figures are recorded, viz.

1,490 c.cm. for males, and 1,337 c.cm. for females. If this means more than a difference in the method of measuring, it may, perhaps, be ascribed to the change of skull type in the western region.

Viewed from the front the skull also seems superficially to have something primitive about it. Below a narrow forehead two enormously developed cheek-bones spread out to the sides, and the lower jaw is remarkable for a truly formidable massiveness and strength. But here, too, the first impression of primitiveness fades on a closer examination; for narrow though the brow is, it is still high, and the superciliary arches are only faintly marked. Nor does the lower face protrude much, whereas the chin is pronounced. Despite the considerable breadth caused by the cheek-bones, the face is by no means especially broad in proportion to its height; its index, calculated in the same manner as that of the top of the head, averages 87.2 for Greenland skulls. On the other hand the face breadth is great compared to the narrow brain-case. The eye sockets give the impression of almost being rectangular and are rather high; if this is an infantile and primitive feature it is, however, found again in many Mongoloid peoples. With the nasal bones we finally come to one of the most remarkable features of the face. In visualizing the popular conception of a 'flatnosed Eskimo', it is difficult to believe that an examination of the skull shows the Eskimos to be the most narrow-nosed people in the world. And furthermore, the nasal bones are reduced more frequently and to a greater extent than those of any other race-type. This peculiar character of the face has again been regarded as an extreme specialization, due either to the dry cold or to the same great development of the chewing muscles which is alleged to have left its mark upon the skull.

To this same specialization furthermore is attributed the massive form of the lower jaw with its strongly marked muscular attachments and the frequent outward turn of the rear angle of the jaw. That chewing really is of great importance among the Eskimos is known to anybody who has seen them soften skins and thongs in this fashion, or who has examined their skulls, in which the teeth are often so worn that the crowns only project a little above the sockets. Rather frequently there are bony swellings, or tori, on the palate and along the alveolar borders of the jaws. The teeth themselves show some typical

Mongoloid characteristics combined with both primitive and progressive traits.

So far we have only dealt with the cranial bones. The shape of the head of living Eskimos naturally reflects the bony structure. We find the ridge of the head and the wide jaws expressed in the 'pentagonal' shape of the face; but on the other hand the covering of flesh has the effect of slightly altering the proportions. As might be expected, the cephalic index is a few points higher in the living population, so that the Greenlanders and the Central tribes can only be called mesocephalic with a tendency towards dolichocephaly. Whereas the nose measured on the skull is markedly narrow, on the living it is of medium breadth. It is only rarely that one finds noses as flat as those of Asiatic Mongoloids. On the contrary the nose is, as a rule, well shaped and often rather prominent. Short, straight noses are common and aquiline noses by no means rare.

The fact that the face appears flat, though never so flat as in the Asiatic Mongoloid type, is chiefly due to the thick layer of fat, which for instance has a marked effect upon the region of the eyes. In very pronounced cases it almost effaces the depression between the eyebrow and the rest of the eyelid, so that the whole of the eye appears almost flat. At the same time the upper eyelid forms a fold down over the canthus in the inner corner of the eye. This so-called Mongolian or epicanthic fold gives the eye, at first sight, a slanting appearance. This formation, however, is never as strongly marked as among many Asiatic peoples, and even among pure-blooded Eskimos it is by no means universal. Among more than 100 adult persons west of Hudson Bay I found it present in 26 per cent. only. In some few cases the eye-slit is really oblique.

The hair is nearly always black, rather coarse and smooth; but it would seem that slightly wavy hair is not always a sign of an admixture of foreign blood. The face-hair is of decidedly shorter growth than that of Europeans, especially on the cheeks; but, like so much else, the lack of beard has been exaggerated. Even pure Eskimos, like many Indians, may have a fairly respectable beard.

Whilst the colour of the iris of the eye in Eskimos of unmixed blood is practically always brown of a lighter or darker shade,

¹ In Greenlandic there is a special word for 'Mongoloid eyes' (qingassut). If this form of eye were general, such a word would scarcely exist.

skin colour depends upon the sex, the part of the body seen, and the time of the year when the examination is made. In spring and summer, when the sunlight is reflected with great intensity from snowfield and sea, the faces and hands of the men assume a tanned, sunburnt colour, which again disappears in the dark period. Women are always of lighter hue than the men, and a blush can colour the cheeks of a young Eskimo girl just as prettily as those of her European sister. It may be said that in general the skin colour of covered parts, for instance the upper arm, is yellowy-brown or light olive - when it is washed! In children a bluish patch is found in the lumbar region, varying in shape and sometimes attaining a considerable size. This was noted in Greenland by Saabye as far back as the end of the eighteenth century; but as the record was written in Danish it was forgotten, and it was only when a similar patch was observed on Japanese children a hundred years later that it attracted general attention as a 'Mongol patch'.

When Stefánsson more than forty years ago announced that at Coronation Gulf he had met with Eskimos with blonde hair and blue eyes, it aroused great attention, and the interest of the public naturally became no less when he declared them to be descendants of the Norsemen in Greenland. Stefánsson, however, is by no means the first to mention 'blonde' Eskimos. Not only had they previously been met with in these regions and recorded in the works of Simpson, Miertsching, and others, but 'blonde' individuals are known to be scattered from the Bering Strait to the Atlantic. They are mentioned as long ago as the middle of the eighteenth century from Labrador and a hundred years ago had already made their way into romantic literature. When Chateaubriand in Les Natchez wished to give a characteristic description of an Eskimo, he wrote about 'the red beard that mingled with his black hair'!

As a result of Jenness's painstaking investigations, however, we may say that the hypothesis of Scandinavian descent has been relegated to the world of sensation where it rightly belongs. In reality there is no evidence for any traces of European intermixture, particularly of Scandinavian. The 'blonde' hair (which be it noted only appears to be blonde compared with the black hair of other Eskimos) is due as a rule to simple discoloration. In the Central regions it has mostly affected the beards of the men and is caused by the daily drinking of scalding hot blood

soup, just as we see beards at home discoloured through excessive tobacco-smoking. In East Greenland, however, 'blonde' hair is met with among the women, who daily wash their hair in stale urine and thus involuntarily bleach it. 'Blue' eyes are more common than 'blonde' hair. These 'blue' eyes, however, are peculiar in that, in the first place, they almost never occur among children and young people, and in the second place, the blue colour is restricted to a ring round the iris, the middle of which is of the normal brown colour. Among the tribes on the west coast of Hudson Bay I have seen many cases like this. Without doubt the discoloration is a purely pathological one, probably brought about by frequent attacks of snow-blindness.

It is not impossible, however, that there are cases of a somewhat lighter pigmentation than usual which cannot be explained by any customary or pathological discoloration; even so, their existence is no reason for embarking upon a search for the old Norsemen in areas where, for geographical reasons alone, it is out of the question that they can ever have come. Quite apart from the possibility of independent mutations within the original type, it must be remembered that comparatively blonde individuals are far from unknown in Central and Northern Asia, especially among Palaeo-Siberian peoples such as the Chukchi, Koryak, and Yeniseians, i.e. among peoples which in other physical characters also have points of contact with the Eskimos.

This problem naturally leads to the question of the race-relationship of the Eskimos with other peoples. Apart from the Australian aborigines, who physically seem to occupy a lower stage than the rest of mankind, we may regard the Mongoloid, the Negroid and the European or 'white' races as the extreme points of variation of the human species. They are like the corners of a triangle which encompasses the whole of mankind. There is no doubt that in this the Eskimos must be placed closest to the Mongoloid angle; but in doing so we do not finally decide that they can be included in the same Mongoloid race as Buryats, Tibetans, Chinese, etc. That it has nevertheless been the custom to do so ever since early days – in the sixteenth century the Eskimos were called 'a sort of Samoyeds', and two hundred years afterwards Cranz found points of similarity between Greenlanders and Kalmuk – has been more on account

of the 'slanting' eyes and the yellowish colour of the skin than on the basis of a really scientifically founded conclusion. As regards the Mongoloid eyes, I have stated that they are met with in by no means all individuals; but what is more, they are not restricted to Eskimos and the Mongoloids of the Old World alone. They are found among many American Indians, and even among Europeans, where they are common in infant children; and they occur regularly among the Bushmen and Hottentots. It is thus demonstrably impossible to build upon this feature exclusively. Nor does the colour of the skin mean anything. The redskins of our childhood are of course neither 'red' nor 'copper coloured', but have received their poetic name through a misunderstanding; in reality, their skin colour in many cases cannot be distinguished from that of the Eskimos. The same applies to the so-called Mongol patch as to the Mongoloid eye: although most pronounced among the Mongoloids it is not restricted to them, but is also known among American Indians, Polynesians, in some cases among Europeans, and so on.

It is obvious that we can make no progress along these lines. We must go to work rationally in quite another manner, and begin at the beginning with the very conception of race.

When we inspect the great variety of mankind with its different shades of skin colour, different head forms, proportions of limbs, and so on, and try to make a reasoned classification out of this chaos, the simplest procedure is to select some principle of classification which is generally applicable. If, for instance, we take the colour of the skin as a starting point, we get the five popular races: the white, the yellow, the brown, the red, and the black. Skin colour, however, is subject to many external influences and it is wiser therefore to try and find a less modifiable basis of classification. Just as the botanist prefers to build up his system from the structure of the flowers rather than from the appearance of leaves or roots, the anthropologist finds it more valuable to start from the structure of the hair, for example, than from the colour of the skin. Within the principal groups arrived at in this manner it is possible to make subgroups by selecting other criteria such as the shape of the head, etc. Mankind has been thought of as a multi-coloured carpet, first cut into large pieces and then into a number of smaller ones. Each piece is described and numbered and laid aside, but

can again be sewn together with the others to form the original pattern. It was in this way that early anthropology worked.

But there is also another mode of procedure that seems to be more rational, though much more difficult. Instead of cutting the carpet of mankind into pieces, we can try to trace the various threads of the texture. We see how the same thread runs from square to square. As has been already said, the 'Mongol patch' occurs among widely different peoples who otherwise have nothing in common. The natives of Australia, who closely resemble the African negro in skin colour, most of all recall Europeans in the structure of the hair and the wealth of beard. The object of the genetic method in anthropology is to find out how the various types which we now find all over the world have arisen. We must understand that the peoples of the earth did not suddenly appear one day, to be placed at once each in their own cage; they have developed, and they have intermingled. Instead of the flat picture of a number of neatly arranged races, modern research seeks perspective and depth, so that we can ascertain the extent and manner of racial mixtures; how some features have been transmitted from the one to the other, how new races have appeared through admixture, and how some have apparently remained little changed from the original type. The Australians may be cited as an instance of this comparatively static position, whereas on the other hand the traits which principally characterize the three greatest of them all, the European, Mongoloid and Negroid races, in many cases are the result of later specialization, each in its own direction.

This is a task so great that it may perhaps never reach completion, and indeed it can only be fulfilled in intimate collaboration with the science of heredity, which has already given invaluable indications. It has taught us to differentiate between the 'genotype' or qualities both latent and apparent in the individual, which is determined by its inheritance, and the 'phenotype' or outward qualities, which are a result of the interaction of the genotype and the external conditions. The manifested qualities alone can be observed directly. The science of heredity has succeeded in showing that when two types are mixed together, some characters are 'dominant' and manifest themselves, whereas others are 'recessive', although they may be latent in the germ cells and will be passed on to descendants. We now begin to glimpse a means of understanding for

instance the circumstances governing the occurrence of different types among the peoples of Europe. Certain features are common to most of the inhabitants of that continent, for instance the nature of the hair-growth; but between the tall, blonde, long-headed Scandinavian, the slender, dark, likewise dolichocephalic Southerner, and the short, brunette and broadheaded Central European, there are essential differences. Obviously they are not due to specialization alone, but also to later intermixture that has welded them together, because some features, which at first belonged to only one of the groups, have been communicated to the others and have consistently triumphed over the corresponding, original features.

That the situation in America is exactly the same has been suggested by the two French scientists Vignaud and Rivet, and Jenness has expressed a similar opinion. Everywhere in that continent we find common traits which correspond with those of the Mongoloids and have therefore presumably descended from a Mongoloid component. This Mongoloid stamp seems to increase in significance the nearer we approach the Northwestern regions in the vicinity of Asia, which, of course, is in itself quite natural. But below this surface, so to speak, lie concealed profound differences. Baron von Eickstedt has distinguished between no less than eight different race types among the American Indians, one of which comprises the abovementioned broad-heads in north-western America, who may be connected with the Chukchi and Koryak on the Asiatic side of Bering Strait, for in many respects these tribes are closer to the American people than to other Mongoloids. Of particular interest, however, is the peculiar type first found in the caves of Brazil by the Danish naturalist P. W. Lund in 1840 and subsequently called the Lagoa Santa race after the place where it was found. There is no proof that the skeletal remains from Lagoa Santa are especially old, though this does not, of course, affect the fact that on the whole they are of primitive character. It has been discovered, however, that the same type exists today in considerable numbers among the population of southeastern Brazil and Tierra del Fuego. Furthermore, it also occurs in the moutains of Ecuador, on the Californian Peninsula and on the south-western plateaux of North America, and also closely resembles the dolichocephalic, Algonkian-Iroquoian type in the north-east of this continent as well as an early

element on the North-west Coast. This scattered distribution, which includes the most remote corners of the hemisphere and regions which are difficult of access, can only be explained if we accept this Lagoa Santa race as a very old element in the population of America. More remarkable still, however, is the fact that nearly all the anthropologists who have at all occupied themselves with this type – de Quatrefages, ten Kate, Rivet, and Sören Hansen – have confidently emphasized its similarity to the Melanesians of New Guinea, but it would probably be more correct to stress its likeness to the Australian aborigines. If so, the explanation would be that the Lagoa Santa race was still rather unspecialized.

From this review of racial problems and their application to American anthropology, we return at length to the problem of the Eskimo race. The first question must concern the influence of external conditions upon the individual. It is difficult enough to determine the importance of environment when one has to deal with plants and animals; but the difficulties become two-fold when dealing with man, because here there is not only a direct influence to be taken into account, but also an indirect one consequent on the fact that man has between himself and nature inserted the whole of that complicated apparatus which is called culture. We must then first confess that the question of the direct influence of environment upon man is still one of the most obscure of problems, even if it goes as far back as to Hippocrates. We actually know nothing about it and cannot therefore concern ourselves with it.

A more indirect influence through culture can, on the other hand, be shown in some cases with a certain degree of probability. The strenuous caribou hunts in the mountains and the general outdoor life make the chest of the Eskimos broad; their arms are powerful, as might be expected of a race to whom rowing and paddling, harpoon throwing and skin scraping are daily occupations. In the southern part of Greenland, where the kayak is used all the year round, the leg muscles are less well developed than in areas where nearly all travelling is done on foot. But taken all in all none of these features can be said to have much importance in the physique of the Eskimos and they only affect their phenotype.

When we turn to the features that are due to inherited

characters, we are at once involved in a very difficult problem. Are any of these inherited features due to the fact that the Eskimos have, in the course of time, acquired a number of qualities through adaptation to their peculiar mode of living, and that these traits have gradually established themselves so that at last they have found a place among the inherited traits themselves? Biologists without exception answer this question definitely in the negative. The genotype is fixed, and none of the peculiarities that are acquired during life, even over many generations, can be inherited.

As regards the Eskimos especially, I have already had occasion to remark that in the shape of the skull there are features which appear to be adapted to their mode of life. Thus Fr. C. C. Hansen and Fürst traced almost all the peculiarities of the skull – the high narrow shape of the brain-case, the reduced nasal bones, the heavy lower jaw, etc. – back to the enormous development of the chewing muscles. They did not shrink from asserting that were all the features due to this specialization removed, the character of the cranium would be reduced to such a degree of colourless generality that there would no longer be any basis for discussing the connexion of the Eskimos with other races.

Such an extreme view, however, is inconsistent with all genetic laws. Be the agreement between mode of life and physique ever so striking, it is for the present not merely our right but our duty to see whether the type cannot be explained in another manner.

In the first place, it cannot be denied that there are many points of resemblance to the Asiatic Mongoloid. Oetteking has – somewhat one-sidedly, it is true – pointed these out in the proportions of the face; important similarities are also to be found in the comparatively short length of the limbs, the slight prominence of the superciliary arch, and so on. On the other hand, however, the form of the cranium differs in some ways very widely from that of most Asiatic Mongoloids, who entirely lack the narrow, high brain-case with the ridge-like crown and the pronounced occipital protuberance. Now dolichocephaly is probably older in the history of man than brachycephaly, and it is principally the features just referred to that give the skull a certain primitive appearance. While admitting that the Eskimos cannot be included among the Asiatic Mongols proper, some

authors have considered them Mongoloids of a particularly old type, a sort of 'primordial Mongoloids'.

We cannot, however, dismiss the problem as solved, for side by side with the primitive features there appear highly developed traits such as the weak superciliary arches, the absence of prognathism, etc., and although there is no reason at all why a primitive Mongoloid type should not have persisted somewhere or other, it could scarcely have been of such a nature that its characteristics were almost equally divided between the primitive and the highly developed. These same primitive features are, moreover, found again in the previously mentioned Lagoa Santa race, whose similarity to the Eskimos was pointed out long ago by Sören Hansen. So long as the type was known only in a restricted part of South America, this similarity was a riddle, but the discovery of its presence in many parts of the New World and, what is more, under conditions which clearly mark it as a very old type, places the matter in a new light. There is at any rate a possibility that it forms a component part of the Eskimo type alongside the undoubted Asiatic element.

In recent years the question of blood groups has been advanced in the discussion of race affinities. It is a well-known fact that human blood will often agglutinate when mixed with serum from another individual, and it has been shown that this change is due to certain agglutinogens in the blood called A and B; many persons, however, lack both A and B, while only a few possess both. The corresponding blood types are called A, B, O, and AB respectively. It has also been maintained that in the history of mankind the O-type is the original one, while first A and at a much later period B came into existence, probably somewhere in Asia. Now it seems that most pure-blooded Indians, both in North and South America, belong to the O-type in an overwhelming degree, whereas among the Japanese and a North Asiatic tribe such as the Tungusian Orok less than one-third are O. On the other hand there is a high percentage of A among the Eskimos and some Indians as e.g. the Blackfoot and Shoshone, and a fairly high one of B at Angmagssalik in East Greenland. Nevertheless some authorities contend that the O-type is the most original among the Eskimos, and the amount of B in East Greenland is probably due to what is known as 'genetic drift' within a small and isolated population. As regards other blood group systems both Eskimos and

Indians show a high frequency of M and a correspondingly low of N. We are bound to admit, however, that the whole problem is still far from clear.

The racial position of the Eskimos then may be approximately expressed thus, that the face is Asiatic Mongoloid and the brain-case of the 'Lagoa Santa-type', while the exceedingly narrow nose places them outside both categories. Their blood group may or may not place them on the same level of development as the American Indian. Not much more can be said until the science of genetics has advanced farther than at present. Till then the question of the connexion of the Eskimos with other races must stand open.

Before we finally leave the question of the physical character of the Eskimos, certain physiological characteristics must be discussed. In earlier writings and not infrequently to-day we meet with the assertion that Eskimo women are less prolific than European women. This is quite groundless. From Greenland there is accurate statistical material which, for the years 1922-30, shows an average annual birth-rate of 42.3 per thousand; on the west coast there was even a slight increase (43.6) for the years 1931-8 and 46.0 for 1954. In Denmark proper the rate for 1929 was only 18.6. It is also of interest to make comparisons with primitive, but also European-influenced, peoples elsewhere. From the Mosetene and Guarayú, two Indian tribes in the lowlands of Bolivia, Erland Nordenskiöld recorded an annual birth-rate of 83 and about 67 per thousand respectively, that is to say, tremendously high figures. The birth-rate of West Greenland approaches most closely to that of countries like Bulgaria and Roumania.

There are of course no statistics from entirely untouched Eskimo tribes; but that the birth-rate is actually very high appears from Knud Rasmussen's investigations among the Netsilik group near the Magnetic Pole. In eighteen casually selected marriages the number of births was on an average slightly over five. A young wife of twenty years of age was the only one who had one child, otherwise three was the lowest number for women over twenty-five years. Of older women two had had ten children, two eleven and one even twelve. Since closer contact has been secured with the Eskimos of the Canadian Arctic we have some statistics from these tribes. For the years 1936–40 the birth-rate was 35 per thousand, but the difficulty

in obtaining exact information is so great that this statement should be regarded as approximate.

The development of the children proceeds more or less as with European children. Whereas Danish boys are slightly smaller than the girls from their eleventh to their fourteenth year, and then take the lead again, the period in which West Greenland boys are smaller than the girls is prolonged to their sixteenth year; this difference is probably merely a consequence of the fact that the Greenland boys at an early age have to take part in hard manual labour, which sets them back a little in their development. Greenland girls reach the marriageable age earlier than Scandinavians, but the difference is not great. Stefánsson believes that in Alaska up to a few years ago puberty was reached at the age of eleven to twelve, but has been delayed by the fact that the houses are now not so well heated. This theory seems to require additional confirmation.

That the Eskimos, despite the high birth frequency, only slightly increase in number is due to a correspondingly high mortality. Happily, mortality in Greenland has for many years been steadily declining, so that as compared with 36.9 per thousand in the years 1871-80 and 25.6 in 1922-30, it was only 16.7 in 1954. Nevertheless, there is a long way still to go before the Eskimos attain a mortality rate as low as that of Denmark proper, which in 1921-5 was only 11.3 per thousand. We can, on the other hand, compare them very favourably with the above-mentioned Bolivian Indians, where the death-rate, in normal years, is 57 among the Mosetene and 52 among the Guarayú. In eastern Canada the death-rate among the Eskimo was 23 per thousand in 1936-40.

There can be no question that mortality was much higher in Greenland before the colonization than since. Bertelsen has calculated the population in the fourteenth century, when the Western Settlement of the Norsemen was destroyed, assuming that the annual increase was 0.5 per cent. According to his calculations there were less than a thousand Eskimos in Greenland at that time; this is doubtless much below the actual figure, and the increase must therefore have been less than 0.5 per cent. As the birth-rate has undergone no great change, the explanation must lie in a far higher mortality in former times.

Mortality is high for both sexes and all ages, and is no doubt due in particular to tuberculosis, which is perhaps the most dangerous enemy of the Greenland and Alaskan communities. Otherwise the conditions in Greenland are marked by two circumstances: the very high mortality among infants, and the very disproportionate mortality among men between the ages of twenty and thirty-five. On the northern west coast the mortality among men of the ages of thirty to thirty-five was at the end of the nineteenth century four and a half times greater than the corresponding age class in Denmark, and on the southern west coast it was even six times as high for the age class twenty-five to thirty. It is obvious that this enormous deathrate among the young men of Greenland is due to their dangerous occupations. Conditions resemble those of Europe in the Stone Age. When the skeletal remains of nearly three hundred individuals of the Danish Megalithic period were examined, it was found that the highest mortality was between the ages of twenty and thirty years, and that only six people had lived to over sixty.

What is otherwise known of the physiology of the Eskimos is almost negligible. A fact which often causes surprise is their ability to live day after day practically on meat alone, and practically without the addition of a trace of vegetable matter. Even now, when bread, sugar and the like have been introduced with the arrival of the white man, the daily quantity of carbohydrates in the food is trifling compared with the quantity of proteins and fat. The fact that glycogenic liver and whale hide (mátak) are such relished dishes may, however, be a result of the unconscious craving of the organism for carbohydrates. After having lived on nothing but meat for fourteen days I have myself felt a violent craving for sugar. A meat diet is however in no way unpleasant. It is true that one quickly feels hungry, but this is no doubt due partly to the 'carbohydrate hunger' and partly because one cannot consume meat in such large quantities as a European digestion with its largely vegetable diet is accustomed to work with.

Blood soup and the entrails provide a varied protein food, and the meat of the aquatic mammals is especially rich in vitamins. Scurvy, which is due to lack of vitamin C, is no longer a disease to be reckoned with, so long as fresh meat can be obtained and life is otherwise lived rationally. The Eskimos, like the carnivorous animals, do not eat salt, because the necessary quantity is contained in the meat. A white man who lives

as an Eskimo soon learns to do without salt for months at a time.

Another point about the food of the Eskimos that is, of course, likely to horrify the delicate, is their liking for meat which is 'high'. This needs a word or two in explanation. In the first place it must be observed that by no means all putrefied meat is considered fit for human food. The fresh meat must be stored away in a particular manner where the air can get to it, but where the sun cannot shine on it. In this way it undergoes a special transformation, so that, for instance, rotten walrus meat tastes more than anything like old, sharp and rich cheese. And it is as such that it is eaten by the Eskimos. It would never occur to them to live for a long time on that kind of food; they eat it as a change. And here we have the physiological aspect of the matter. In their aboriginal state the Eskimos know neither alcohol, tobacco, spices nor any other stimulants; but in spite of all the apostles of abstinence, it appears to be a fact that limited access to stimulants is a physiological necessity, and more so for men than for women. It is not improbable that the Eskimos' and other polar peoples' taste for rotten meat has its root in this factor.

I have seen a large wooden tray piled up with freshly cooked, steaming caribou heads pushed into an Eskimo tent, and in the course of a few minutes there was not a vestige of meat left on the bones. People are prone to think that the Eskimos are a race of gluttons, and instances can be multiplied of travellers who have made themselves interesting at the expense of the Eskimos by describing the mountains of food and blubber they consumed. In reality there is hardly a 'civilized' person sitting down to a six-course dinner who cannot be said to be a greater gormandizer than the Eskimos. The startling accounts of their greediness usually come from expedition stations or trading posts, where of course it is 'good sport' to see how much a 'savage' can hold.

It must not be forgotten also that if the Eskimos eat long and heartily when the opportunity is there, they can also starve with serene calm. In West Greenland I once excavated a house ruin, dating probably from the time just prior to Hans Egede. Tradition said that all the inhabitants had died of hunger, and this was no doubt the truth, for the place was full of human bones, besides large numbers of implements from the man's hunting weapons down to the toys of the children. On the

Barren Grounds in Canada I visited a camp where a man and a young girl came out of one of the tents while the rest remained inside, too exhausted to get up owing to hunger. Before a week had passed we ourselves were out for four days without eating. It is then when the shadow of death reaches out from the silent polar land that one learns to know the 'greediness' of the Eskimos in its true character.

In reality I believe that anyone who has lived among Eskimos, not at a trading post but in one of their settlements as one of themselves, will readily admit that on an average they eat less than white men in everyday life. A small meal in the morning, and an abundant one in the evening, is as a rule sufficient. On one point only do they display a lack of moderation, and that is with regard to water drinking; a lot of water, and that ice-cold, is considered to be a necessity. This, however, is probably connected with their specialized meat diet, and the constant cleansing of the kidneys undoubtedly saves them from a lot of rheumatism in their old age.

If we are now to add a few remarks on the Eskimos' psychological peculiarities, and their character as a people, it must first be realized that adult persons have never been subjected to modern psychological examination. These remarks can therefore be only in the nature of a series of impressions, which must naturally be to a certain degree subjective. Nor must anything mystical be read into the often abused expression 'national character', which is intended merely to express the sum of all the individual characters, for of course personality differs among the Eskimos just as it does in a civilized society. It would, however, be foolish to assert that there may not be psychological differences in racial character as well as physical differences, and mode of living and environment definitely leave their traces on the mind. The psycho-physical processes themselves are naturally the same in primitive peoples as in ourselves; but, for the reasons stated, their manifestation may be different. The difference, however, is one of degree and not of essentials. It is the field ethnographer's richest experience when he finds at last that the objects of his study are really well known to him as men in all their complexity, in their sorrows and joys, which are after all fundamentally the same as our own.

Many superficial judgements have been passed on the char-



Chugach Eskimo, Approaching the type of the American Indians

Woman from Point Barrow, the northernmost place in Alaska



Mackenzie Eskimo from Baillie Islands wearing old-fashioned labrets

Girl from Coronation Gulf. One of the typical 'blonde' Eskimos



Polar Eskimo mother with the Thule Mountain in the background

acter of the Eskimos, from the old French writers who spoke of the Labrador Eskimos being as wild and savage as the wolves with which their country is overrun, to such a prominent scientist as Fridtjof Nansen, who cannot plead entire innocence when he summarizes his views by merely saying that the Greenlanders are the most inoffensive and kindest people under the sun. The most sober and unprejudiced judgement of the untouched Eskimo mind that I know is Jenness's description of the Copper Eskimos, which though at times severe is never unjust.

The Eskimo power of perception is keen and rapid whenever they can be expected to understand what it is they see. As soon as they catch sight of a caribou they visualize the hundred details of the forms of the landscape, wind and weather and vegetation, on which the successful outcome of the chase depends. Travelling in their own country they almost unconsciously absorb innumerable impressions which serve to guide them. The white man who is not so accustomed to noticing these small differences in the appearance of a monotonous undulating tundra or the direction of the drift of the snow over the ice, seems to be witnessing the functioning of a sixth sense, but can of course train himself to do the same. On the other hand, I have seen an intelligent Greenlander stand quite lost in a city right beside the hotel we lived in. He had not yet become accustomed to discriminate amid city architecture, illuminated shop windows and electric signs in the same manner as we do.

There is one point, however, on which Eskimo understanding seems to fail, if not for lack of ability, at any rate for lack of practice. The part of the Greenland school curriculum which is most difficult to impart is, without question, arithmetic. To this day one may see Greenland housewives stand in a shop paying and receiving change for each single article they buy, until the small coins have crossed the counter five or even ten times; otherwise the transaction is too difficult. This inability to deal with numbers is connected with the difficulty of the Eskimos to work with abstract notions. In Eskimo there are ordinary numerals up to twenty, but where school or trading intercourse has not made matters clear, there is as a rule the wildest confusion as soon as they get beyond ten – and sometimes before that. Even if the words are known, few are capable of associating more precise ideas with such words as seventeen or twenty than

we do with million and billion. They are simply incomprehensibly high figures. This trait is primitive, and the Eskimos share it with many other uncivilized races. This difficulty in working with abstract notions is met with again when the question is one of making a comparison between several possibilities. Knud Rasmussen once asked a Netsilik Eskimo which of two roads was the shorter. Although the man knew them both perfectly well and could tell how long it took to travel each of them, it was impossible for him to retain them in his mind at the same time and make a comparison. We all know similar cases from children.

Jenness maintains that the Eskimos – that is to say only the entirely uninfluenced – are unable to follow a logical sequence. When one of them is to make a report, says Jenness, 'He starts in the middle, returns on himself to explain some allusion, and wanders backwards and forwards in this manner until he has completed all he has to tell.... Direct questions, unless they are simple requests for an enlargement on some remark he has just made, almost invariably confuse him, and he becomes incoherent or silent.' This is true enough; but I do not think it can be ascribed to lack of logical thought, so much as the lack of ability for systematic description.

It must not be forgotten that the expression of their logic may be quite foreign to us because the ethical background is foreign. I know a man who was angry with his young wife because she had allowed another to share her favours. The other women in the settlement took offence, but against the husband not the wife, and for no revolutionary feministic opinions, but solely because the husband gave vent to his anger after the wife's false step. What was past was past! Had it been before, so that his anger could have prevented the occurrence, it would have been justified; afterwards it was merely disturbing the peace of the settlement.

If their logic differs from ours – and there is no doubt that to a certain extent it does – the reason is another and much deeper one. They do not recognize any clean-cut boundary between what is 'natural' and what is 'supernatural', nor are their concepts entirely intellectual but always confused with emotion and volition. Their whole attitude of mind may be described as 'pre-logical' according to the rather unhappy terminology of Lévy-Bruhl. This does not mean that they are incapable of

logical thinking, but it often gives their thoughts a 'mystic' tinge foreign and even incomprehensible to us. There will be ample opportunity for observing this in the chapter on their conceptions of the world. Here a single example will suffice. A Polar Eskimo explained why the bear hunt had failed in the following manner: 'There are no bears, because there is no ice, and there is no ice, because there is too much wind, and there is too much wind, because we have offended the powers.' Thus the illogical element only turned up in his train of thought when his experience failed.

Nothing would be more incorrect than to conclude from this that the Eskimos are dull and unintelligent. Within their restricted horizon they are, on the contrary, both lively and quickwitted. Generally they are in possession of an optimism which, as Margaret Lantis has pointed out, acts as a kind of defence against the vicissitudes of life. They are always ready for fun and therefore give a much more directly pleasing impression than do their rather reticent and sullen Indian neighbours. The Eskimos have a marked sense of humour, tinged often with a hint of malice of the 'mote in his brother's eye' variety. The reverse of this quality is that in the small communities gossip flourishes as virulently as anywhere else under milder skies. Their lampoon songs against each other are usually devoid of tact and delicacy, but contain an acid mockery and a scorching wit that is capable of paralysing an opponent.

A primitive trait which must not be forgotten is an often rather pronounced lack of self-control and a consequent absence of the feeling of responsibility. I have seen an elderly pater-familias, looked upon as a primus inter pares among his countrymen, get so excited and eager at the sight of a pair of caribou that he blazed off his last cartridges while still an absurd distance away, although it was ten days' journey to the nearest trading post where he could obtain a new supply of ammunition. This lack of self-control is also responsible for many of the murders that stained the untouched Eskimo communities.

This same character trait takes a peculiar form in the socalled 'arctic hysteria'. Miss Czaplicka has written an interesting paper on the occurrence of this in Siberia, and it is also well known to the Eskimos. The most trifling incident will sometimes turn them, especially the women, quite crazy. As has been aptly said, they are seized by a 'psychic cramp', during which they give vent to meaningless sentences, and break everything within reach. As a rule, the fits last only a short time. They seem to be especially common among the Polar Eskimos, where the long winter night is trying to the nerves.

At the basis of man's social psychology lie a small number of primitive instincts, some of which are strongly developed among the Eskimos. When an old-fashioned European village forms a solid whole and looks with mistrust and anger upon one who would stand outside the circle, and when a trade union exercises a discipline approaching tyranny, it is by no means the result of social considerations first and foremost. It is the gregarious instinct, similar to that which keeps monkeys and wolves together in hordes, which lifts its head. The horde is the highest authority solely in its capacity of mass, and the individual who is not with it is against it. If there is anything that can disturb the mind of the Eskimo it is the prospect of standing alone against the crowd. Their judicial settlements of quarrels in the form of singing lampoons in verse against each other are often advanced as a proof of their kindliness. But the man who gets public opinion against him in this singing-combat thereby suffers a punishment which, though certainly not intended, for the performance does not aim at meting out justice (see p. 150), is none the less painful all the same. It is everywhere the privilege of the few to be able to stand firm against the weight of public opinion, and among primitive peoples of one in a thousand.

This is undoubtedly connected with a certain mental inertia due to an emphasis of what McDougall calls the instinct of subjection. It is difficult for an average Eskimo to assert himself against others. It would never occur to him to give an order, even if it were necessary. I recall a journey down the Kazan River in a canoe with Eskimo paddlers. This particular stretch of river, which had never been mapped, turned out to consist of a series of lakes and broads connected by short sections, in which the water rushed at great speed through narrows and over rapids. It required the utmost care to guide the canoe through the foaming whirlpools, where large rocks and drifting pieces of ice often threatened the slender craft with immediate destruction. Nevertheless, it was difficult for the steersman to make an independent decision. More than once he answered the paddlers' question as to what they should do with a resigned âmai! ('I don't know'), whereupon they all rested on their

paddles to discuss the situation, and away we rushed, turning and heeling, till the problem was finally settled without human intervention. The steersman's method of tackling the situation is typical.

The Eskimos are easily influenced and it should be noted that this is so to a far greater extent than with us. He who speaks with authority is readily believed. This explains the great power of the magicians or shamans. Examples are even known of socalled tanathomania, i.e. of a man actually dying merely because another has said that it would happen. On the whole it must be remembered that although their lack of self-assertion is a fundamental trait of character, so pronounced indeed that it leads to wilful coquetry, as when a shaman or singer invariably emphasizes his own incompetence prior to performing, there are always people in whom this quality is less strongly marked and who thereby come to play a prominent part in the community. An outstanding person in the Eskimo community can maintain his position because he does not place himself outside public opinion, but leads it. Rule by public opinion need not be synonymous with democracy.

Another primitive trait, deriving from this strong development of the gregarious instinct, is the marked sympathy of the Eskimos. The word must be understood as community of feeling and must not be confused with pity. The feelings of the one are readily conveyed to the others on the slightest occasion. When a man laughs, he immediately infects the others present, and if one begins to weep over a dead relative, the others will also begin to wail. I have seen a man who had lost his wife that morning, take active and lively part in a drum dance in the evening. There is no question that he sorrowed deeply for her, but the general merriment in the camp seized him irresistibly.

Genuine love between man and wife often exists, more especially perhaps when they grow older, and they always display the greatest tenderness towards children. Nor can it be repeated too often that better and more helpful travelling companions than the Eskimos are not anywhere to be found; and an Arctic journey does not mean a Pullman and a palatial hotel, but daily hard work that sometimes turns into a fight for life. A man who had had long experience as a post manager among the Eskimos and the Naskapi Indians in Labrador once said to

me: 'When you travel with the Eskimos, they try to make everything go as well as possible for you, because they know you are a stranger and to a certain extent helpless in their land. When you travel with the Indians, they try to make life a burden in every possible way until you have acknowledged their superiority. Then, and only then, they may perhaps change their ways.' At a later date when I was travelling with some Cree Indians I had occasion to remember these words more than once.

The patience and primitive shrinking from self-assertion of the Eskimos is to a great extent the cause of the peacefulness which most travellers agree in underlining as one of their most prominent qualities. A pleasant, smiling kindness, though, as already stated, by no means blindness to the weaknesses of others, is one of the first things one meets with. Yet the ferocity of the Labrador and Alaska Eskimos of which the whalers and fishermen of former days spoke was not entirely unmerited. As regards this trait there have undoubtedly been local differences. The region round Bering Strait, where Eskimos proper, Aleut, Chukchi and many Indian tribes meet, was doomed to be the breeding ground of war and bloodshed, and all the way along the Arctic coast the Eskimos have been in constant feud with the Indians. This naturally leaves its traces in the character. But even the Greenlanders, with no one to quarrel with but themselves, were before the colonization anything but the peaceful people whom we now know. Even one or two generations ago murders were numerous on the east coast, as they were only a few years past among the Copper and Netsilik Eskimos in Canada.

The lack of any feeling of responsibility can make them coldblooded witnesses of murder, and among those tribes who are still in a primitive condition there are many mothers to be found who guide the steps of their children with the most loving care, but whose hands are nevertheless stained with the murder of newly born infants. Death is measured by a standard other than ours in these regions, where it must be faced almost every day. It cannot be concealed that we can draw examples of thoughtless brutality from the life of the Eskimos. But are the very white nations who exterminated or drove out weaker races by the socalled right of 'race' or 'culture', to be the ones to cast the first stone?

Geographical and social surroundings naturally exercise a great influence upon the mental disposition of the Eskimos and contribute greatly towards forming their national character. There is no plutocracy whose shameless exploitation breeds envy and hatred. On the other hand, the small size of the communities and the slight sum of their experience draws a narrow horizon about their minds. He who comes in from the outside is certainly the object of curiosity, but by no means admiration, for when all is seen and said the only right thing is what one does oneself. Another conservative factor is their religion, which is not, it is true, stiffened into dead dogmas and formulas, but does nevertheless give in advance a number of explanations which are accepted without question. Even though problems do present themselves, uncertainty of mind which signifies doubt has an unpleasant effect upon primitive man, who therefore either compromises quickly with them or else simply allows them to lie and passes on unconcerned.

The preceding remarks will probably suffice to throw some light on Eskimo 'values', by which I mean the qualities valued by the Eskimos themselves and not an appraisal of their culture - a problem which in my opinion belongs to philosophy and not to ethnology. Prestige attached to wealth and rank as among the Northwest Coast Indians or to military achievements as among the tribes of the Great Plains is foreign to the Eskimos, nor does concern about the hereafter trouble their mind. To them the all-absorbing question is how to overcome the difficulties of an inhospitable environment. A clever and enduring hunter and a good housewife and seamstress are therefore the ideals of man and woman respectively, and when old age and infirmity make life a burden to themselves and their children they should depart this life or even seek death themselves with equanimity. They are individualists in so far as nothing is considered more repulsive than aggressiveness and violence, while on the other hand far-reaching helpfulness among campfellows is an inevitable duty.

No attempt has been made to picture the Eskimos as being other than they are, and as far as possible both light and shade have been portrayed. Some peoples are admired only on closer acquaintance. The Eskimos cannot complain, for on many occasions they have been given most praise by those who knew them least. It would nevertheless be most unjust to assert that

association with them leads to disappointment. On the contrary it is only by penetrating their mind to the best of our ability that we can reach understanding, and a comprehension that they are neither devils nor incarnations of unadulterated innocence, but live men and women. They are not phantoms on Prospero's enchanted island, but just because they are human beings one may with so much the greater pleasure apply the words of Shakespeare:

... though they are of monstrous shape, yet, note Their manners are more gentle-kind than of Our human generation you shall find Many, nay, almost any.

CHAPTER III

The Language

Some few to be chewed and digested.' Thus Francis Bacon expressed himself in one of his essays almost four hundred years ago. The reader of this book may already be of the opinion that it is making rather heavy demands upon his powers of mastication. But we can only reply that when considering a people who, in appearance and thought, in language, mode of living and environment, are so widely different from ourselves, we must necessarily encounter obstacles to our comprehension. On the other hand, as has already been said, it is the reward of ethnology that beyond all that is strange, often bizarre and sometimes even repulsive, we find that which grips us all, because it is the old familiar subject: ourselves, the universally human.

The reader must not be deterred by the title of this chapter. There will be no lecturing on Eskimo grammar. My object is to indicate, in very brief outline, some peculiarities in the construction of the language of the Eskimo and to show how linguistic knowledge increases our understanding of the people. I am myself a layman in this domain to a greater extent than perhaps in any other dealt with in this book, and I must emphasize in gratitude the debt I owe, as regards the fundamental questions, to various works of Otto Jespersen and Franz Boas, and for Eskimo in particular to Thalbitzer, Hammerich and Knut Bergsland.

Eskimo was the first American language, and I believe the very first language of a primitive people, to be examined from the point of view of modern phonetics. The results achieved by Thalbitzer in this respect, in his studies of various West Greenland dialects in 1900—1 and since extended by his researches in East Greenland, have plotted out in a decisive manner the guiding lines of our understanding of the phonetics of the language as a whole. In one respect the phonetic straights.

considerably from languages that Europeans are accustomed to hearing. We usually regard the correct placing of the stress in a word as being more important than the length of the different sounds in relation to each other. Anyone familiar with classical scansion with its arsis and thesis will be familiar with something that resembles Eskimo. In this language the length of the sounds – and be it noted not merely that of the vowels but also of the consonants – is of greater importance than the stress, so that quantity can often be the sole difference between two otherwise exactly similar words, for instance qiavoq, he weeps, but qiavoq, he is cold.

Beauty of language may be a matter of taste and personal sympathies, and the attention one gives to the meaning of the words may easily veil the opinion of the mere sound. A language like that of the Chipewyan Indians, for example, is in my opinion most unbeautiful. The many nasal and lisping sounds, the spluttering explosive consonants, cannot be redeemed by even the prettiest female mouth. The Cree language, with its clear vowels and simple consonants, is on the other hand sonorous and beautiful. Eskimo occupies a more or less intermediate position. The frequent occurrence of q, a k pronounced with the uvula, sounding somewhat like rk in English (not in American) pronunciation, and of a surd, or unvoiced l (written dl in Greenlandic), as well as the rather more infrequent use of sounds corresponding to the German ch sounds, often give the words a certain harshness; but this is to some extent counterbalanced by the soft g's and the palatalized consonants, which slightly recall Russian. In the eastern dialects there are only three vowels, a, i, and u, although their pronunciation may be slightly modified by the adjacent sounds. In South Alaska a fourth vowel occurs, like the first sound in 'about' (here written è). Besides, there are in all dialects definite rules for initial and final sounds of a word.

Certain groups of sounds have undergone regular changes in the various Eskimo dialects. In West Greenland there has obviously been a far-reaching alteration in pronunciation during the past two hundred years or so. This appears clearly from the orthography, which dates from this period and, as everywhere, has strong conservative tendencies. Thus one writes auveq, walrus, but pronounces it exactly like åveq, a roof beam, with a long å and with no diphthong. In the earliest Greenland

dictionaries we find tukto, a caribou; now orthography demands tugto, though one invariably says túto with long t and with no trace of a g or k sound. But we need go no farther than to the Polar Eskimos in the Thule District to hear both diphthongs and consonant groups spoken with all desired clearness; the same applies to the Central and Western dialects. Now the Greenland orthography cannot possibly have been influenced from that quarter, as the tribes concerned were almost or quite unknown when the earliest Greenlandic orthography saw the light, and therefore the only explanation can be that in West Greenland there has been an assimilation of certain sound-combinations into uniform, long sounds.

While these have taken place during the course of the last two hundred years or less, other phonetic changes in the language are much earlier. In Greenland 'thou' is ivdlit, in northern Alaska ilvit; thus the labial v is differently placed. In Labrador and the Central regions there have been special changes; but the form from which they have emanated corresponds to the western form. There is no doubt that the latter is on the whole the oldest, and in Greenland there has occurred what is known as a retrogressive labialization. Of much greater importance, however, is another phonetic change, the so-called retrogressive uvularization, that is the reversal of r and another consonant. Greenlandic tôrnaq, an assistant spirit, corresponds with tônrag in the west, mardluk, two, becomes malruk, and so on. On the Fifth Thule Expedition the boundary of this phonetic change was found to be the west coast of Hudson Bay, so that this retrogressive uvularization has occurred in Greenland, Labrador and the Iglulik area, but not in the regions to the west.

There can be little doubt that in these cases we find the original forms in the west. In the eastern dialects the course of events has been anticipated in speech and the rearmost consonant has been moved forward. In this manner it has been possible to facilitate pronunciation. It is only necessary to pronounce the various forms to notice that the eastern ones fall more fluently than those from the west. This must not, however, mislead one into thinking that the language in Alaska is in all respects at an earlier stage than are the eastern dialects. There has been at any rate south of Norton Sound a special development, with the result that an original \check{e} and a palatal n

(which in the eastern dialects have become *i* and ordinary *n*) have been dropped in certain combinations; for instance *shtaman*, four, corresponding to the more easterly *sitamat* or *sisamat*, and *juk* or *shuk*, person, corresponding to *inuk*.

The vocabulary of a language is of course dependent upon both its geographic and its cultural surroundings. We cannot expect to find words for 'tropical jungle' or 'Postmaster-General' in the Eskimo language, but this is no reason for calling it poor.¹ On the contrary, for the concepts which most frequently and most deeply affect their daily life, there is a veritable abundance of words. Where we have the single term 'snow' there are, in Eskimo, quite separate words for 'snow in the air', 'drifting snow', 'snow lying on the ground', and 'soft, watery snow'. There are in addition derivatives of these and of other stems which describe snow as newly fallen, drifted into the house, hard, soft, suitable for building snow houses, and so on. This can hardly be called poverty.

On the other hand, the Eskimo language may with some justification be described as primitive; but poverty and primitiveness are not the same in language - in certain respects they are rather opposites. Observe that in English and closely related languages there is the same extravagant abundance of words for some of our simplest and most primitive notions. In connexion, for instance, with such an ancient domestic animal as the ox, we have, apart from the word ox, the mutually differentiated terms bull, cow, bullock, heifer and calf. They are an inheritance from more primitive conditions, when notions were fewer and therefore one could afford to burden the memory with a whole series of special terms. Now our notions are so manifold and motley that a specialization of the terms for kangaroo and baboon similar to that for ox is scarcely likely to be made. It is another primitive trait that, despite the crowd of proper names, the universal and more abstract words are lacking. For instance, there is no term for snow in general in Eskimo; but only specific terms for the various forms of snow. Among the still more numerous words for seals of all kinds and ages, in all positions in the water and on the ice, there is now, at any rate

¹ Incidentally, however, it may be of interest to note that there is a genuine Eskimo word for 'humming bird' (maggtarpaq). The summer habitat of one species of these birds includes the forest-clad shores of Prince William Sound in Alaska, where there used to be a considerable Eskimo population.

in Greenland, a generic term for seal, but this has come about by extending the meaning of one of the special terms, the seal rising in the water. But we find exactly the same thing in our own Indo-European languages, in which the word ox really signifies draught-cattle and has been similarly generalized.

The circumstance that the concepts lying behind words are often different from ours and therefore appear strange must not be taken to imply that the language is itself primitive. The connexion between different ideas that is manifested in words derived from the same stem, which is particularly evident in Eskimo, with its incredible possibilities of derivation, often gives an interesting insight into the psychology of the 'language', i.e. of the speaker. If as a casually chosen example we take the Greenlandic stem ake, which really means 'that on the other side of something', or 'that straight opposite', we first find it used in its restricted sense of 'window platform' (i.e. that right opposite the sleeping place). But other concepts crowd forward and link up a mass of ideas which remove themselves more and more in various directions from the fundamental notion, although this is never wholly lost sight of even when the connexion is to us imperceptible. From 'that straight opposite', for instance, the term 'barb' is derived; here the connexion is with something projecting which, as with us, is both literally and figuratively the same as 'outstanding', 'important'. But 'that straight opposite' can also lead to thoughts of that which starts from over there, to ideas such as reflect and resound, or as answer and payment. The payment may be a compensation for someone who has died for instance, and the term which means to name a child after one of its departed brothers or sisters is derived from the same stem. But the payment may also be a remuneration and through it lead to a number of commercial words such as lend, be in debt, take on credit, and so on. Further, the payment may be a retribution, a revenge, and 'that straight opposite' then becomes 'he who is straight opposite', i.e. an enemy or an opponent.

Undoubtedly a primitive trait is the tendency, as far as the independent stems are concerned, to perceive and describe in terms of experience. Besides, a negative notion is often used as a base whence the positive notion is derived, for instance 'good' really means 'not bad', and instead of 'I know' you must say 'I am not ignorant of'. Thus it is not without reason when it has

been asserted that 'peoples speaking different languages may be said to live in different worlds of reality'.

The angákoq (shaman or magician) often uses a number of special words during his incantations. Some of these are little-known archaic words, others are paraphrases, as when the bear is called 'the trudger', the earth 'the great darkness', or the like. Mystically coloured professional language is not unknown to our own domestic angákoq's either, both those in the pulpit and those who find it necessary to speak of ventricle and lower extremities instead of stomach and legs.

Eskimo words are usually long and polysyllabic. Two or three syllables are the rule for the stems; but in their derivatives their number is multiplied. This is in exact line with the whole construction of the language, for the outstanding character of Eskimo is its incorporating and polysynthetic structure. It is incorporating because the pronouns are expressed in the verb during inflexion; governed nouns are not however incorporated, as they are in certain other languages. Eskimo is polysynthetic, because an endless chain of ideas can be linked together in one word, a veritable centipede of a word, for which we should require one or more sentences to express the same thought.

In some polysynthetic languages independent words, or stems, can be joined together, but this is not the case with Eskimo. There are independent word stems and about two hundred suffixes, which can never stand alone but must always be attached to one of the independent stems. Igdlo, a house, may thus become igdlorssuag, a large house, or igdluliorpog, he builds a house; both suffixes may even be united to the stem to become igdlorssualiorpog, he builds a large house. Though this may sound strange, it is merely a further development of something we ourselves have done. Where we, for instance, say 'judicable', 'judicial', 'judicious', the suffixes give the same root different meanings, but in themselves they are not independent and may also be used in quite other combinations. In the Slav and Romance languages the use of suffixes is even more marked than in the Germanic, for instance in Russian devitsa, girl, devochka, little girl, devchonka, wench, and so on. Thus the differences between the constitution of Indo-European and Eskimo languages are not those of essentials but of degree. They are nevertheless very far-reaching; for where with us the use of suffixes is quite rudimentary and scarcely conscious, the whole Eskimo grammar is. one might say, based upon the incredible ease with which idea can be linked with idea. Rink has calculated that the word igdlo, house, can receive eighty different suffixes; and one single, arbitrarily chosen derivative could form sixty-one new derivatives of the second degree; to one of these another seventy suffixes could be attached, and by keeping on choosing one of the new derivatives one could go on to eight of fourth, ten of fifth and ten of sixth rank. Even if the number of suffixes that may simultaneously be appended to a stem rarely exceeds ten, the result is worthy of respect! Take, for instance, the following, which consists of stem, seven suffixes and the termination:

igdlor - ssua - tsia - lior - fi - gssa - liar - qu - gamiuk house large rather build place to be go bid when he him i.e. when he bade him go to the place where the rather large house was to be built.

Another characteristic resulting from the structure of the language is the fact that the word, or sentence, begins with the stem which to the Eskimos is the fundamental concept, and ends with the personal suffixes, for instance:

oqa - lo - qati - gi - niar - uma - galuar - pa - vkit tongue using fellow have for intend to would like to (do) I you

The suffix -qat(i) refers to the circumstance that a mutual action, a conversation, is involved, while -pa is the verbal mark, the whole meaning thus being: I should very much like to speak with you, implying even a polite suggestion such as 'if it be possible'.

Eskimo in this manner recalls organic chemistry: in both it is possible, from a small beginning, to build up imposing complexes by a logical application of definite rules. The linking chain that runs through these is, as regards the Eskimo language, its passive and, still more, its possessive character. Even such a simple word as 'I', uvanga, can really be disintegrated into uva-nga, here (being) with reference to me, my (being) here, i.e. I. From igdlo, house, is formed igdlua (igdlo-a), house with reference to him, i.e. his house, and igdlora (igdlo-ra), house with reference to me, i.e. my house. The inflexion of the verbs is quite parallel to this; thus tusarpara (tusarp-a-ra) means his making a sound with reference to me, i.e. I hear him. For this reason a sentence such as 'the woman sees the dog' cannot be

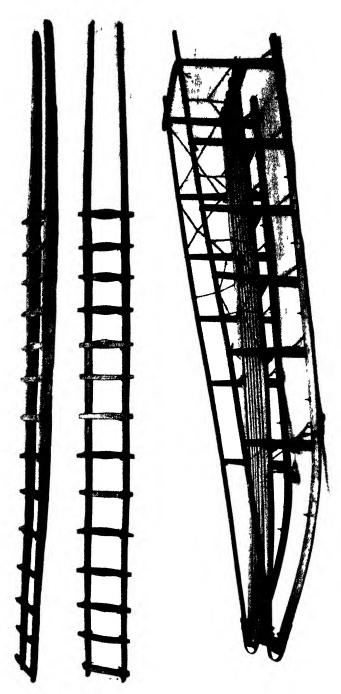
expressed in our way. In Eskimo it is arnap qingmeq takuva, actually: with reference to the woman, the dog, its appearance before her. Thus there is really no boundary between nouns and verbs in Eskimo.

There was a time when Greek and Latin with their wealth of forms were regarded as types of the 'perfect' language. But we have long seen that all this swarm of gender, case, person, and so on, richly sprinkled with irregularities and exceptions, result on the contrary in making speech heavy and stiff. A language like Danish, and to a still higher degree English, stands in development ahead of medievally-stamped languages such as German and Russian, not to speak of Greek and Latin,1 and this development does not mean decay, but progress in concise expression without the weight of superfluous form. Compare, as Otto Jespersen says, the drawling Latin opera virorum omnium bonorum veterum, where both plurals and genitive are, to no purpose, expressed no less than four times, with the bold English 'all good old men's work', where number and case are only named once and yet cannot be misunderstood. In this case Danish stands midway between - alle gode, gamle mænds arbejder.

Just as primitive as the extreme demand for agreement in form, which has been pressed to its utmost limits, for instance, among the Bantu in South Africa, is the piling up of ideas in a single word. In the Latin cantavisset no fewer than six ideas are crowded together, viz. (1) to sing, (2) that the song took place before something else happened (pluperfect), (3) the conditional, (4) the active, (5) third person, (6) singular. It is not a far cry to an Eskimo word like tusarpago, which in a similar manner combines the ideas (1) to hear, (2) the conditional 'if' or 'when', (3) active, (4) third person, (5) singular, (6) he or it, heard by the person concerned, who again is indicated as (7) third person, and (8) singular.

Psychologically, this crowding of ideas into one word is easily comprehensible from primitive presuppositions. Our modern type of language presupposes an ability to analyse and abstract that cannot at all be expected of an untrained mind.

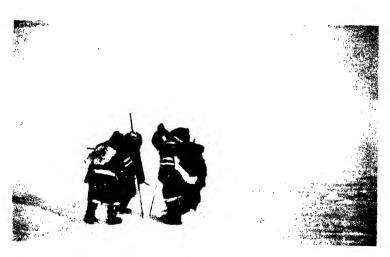
¹ In order to avoid misunderstanding I wish to emphasize that I speak from a purely historical standpoint, and no depreciatory meaning should be attached to my remarks on the languages of Goethe and Socrates, or of Tolstoy and Cicero.



The most primitive and the most highly developed type of Eskimo sledge. From the Caribou and Mackenzie Vational Museum, Copenhagen Eskimos respectively



Sledging among the Aivilik Eskimos. The number of dogs is unusually great



Netsilik Eskimos at the breathing-hole. When a seal's breathing-hole is found, the hunters vie to hit it with their harpoons, and the most successful gets the right to it

Consider a word like 'to', which expresses nothing except in relation to something else, or 'and', which is meaningless when it does not combine two links - in other words two pure abstractions, which in Eskimo are very naturally reproduced by dependent suffixes. Even when we say 'a big house' we have in reality unconsciously made an analysis. We do not first see the house and then the abstract notion 'big' as something separate alongside it; but we see something that is simultaneously a house and big. On this point the ancient Romans were just as modern as we are; but the igdlorssuag of the Eskimos is decidedly more primitive. For it is very improbable - although Bogoraz thought the opposite – that the suffixes have ever been independent words, and therefore the comprehensive Eskimo method of expression corresponds more to the impression of the senses than ours. Otto Jespersen is completely apt when he compares the development of a language with the development from picture-writing to modern, analysing, alphabetic writing.

On the other hand one cannot simply dismiss everything in the constitution of the Eskimo language as primitive and inexpedient. In reality it is on a level with English in its lack of gender; it can just as easily as any civilized language form abstract ideas of all verbs, and indeed, in one respect at any rate, surpasses both English and Danish, for with regard to time it displays an ability of abstraction that is in sharp contrast with its strong demand for place. For whereas we can only say 'the man is hungry', or was or has been, and so on, and therefore must necessarily indicate the time, if the verb is expressed, the Eskimos allow the question of time to remain quite open, so that as a rule the answer is only to be seen from the connexion (angut kâgbog, really only 'man hungry'). It is however improbable that these useful qualities have been acquired through development. Rather do they belong to the original disposition of the language. We must remember that, even if the development of any language may on the whole be said to be directed towards the same goal, viz. the expression of ideas with everincreasing facility, not only the paths, but the starting points, are different.

For Eskimo proper the most important linguistic boundary runs between Unalaklit and St. Michael at the head of Norton Sound. North and east of this line, as far as Greenland and Labrador, the dialects are almost as closely related to each other as are the English dialects. They belong to one language known among Eskimologists as Inupik (derived from inuk, human being). Actually the difference between the language in Greenland and northern Alaska is so small that the day after Knud Rasmussen came to Point Barrow in Alaska he delivered a lecture on his travels to the local Eskimos in Greenlandic, and neither his pronunciation nor his choice of words were any hindrance to comprehension. If the dialect of East Greenland seems a little foreign to other Greenlanders, the difference is more apparent than actual; in reality it is very close to the dialect on the south-western coast of Greenland. Its peculiarity is due to a great extent to a strict observance of the general Eskimo rule, according to which a word that is used as a name for a person must go out of the language when he dies and be replaced, at any rate temporarily, by a circumlocution.

But at Norton Sound we find a really abrupt change. Mutual understanding between the Eskimos north and south of this apparently accidental boundary is out of the question, as the languages differ almost as much as English and German. The South Alaska language or Yupik (from yuk or juk) includes four rather divergent dialects spoken on the mainland north of the Alaskan peninsula, Nunivak Island, the Pacific coast and Kodiak, and the Siberian mainland respectively. Still more does the dissimilarity grow when we leave the Eskimos proper and go to the Aleut. It has already been mentioned that the difference between the Aleut and Eskimo tongues is so sharp that for a time there was a doubt about their mutual relationship. At present, however, there can be no doubt that Aleut is related to Eskimo. Bergsland asserts that even though the vocabularies differ considerably, the difference is not quite so great as it might appear at first glance, and in many cases it may be due to word taboo similar to the lexical innovations of the East Greenland dialect. Besides, the majority of Aleut suffixes, including all number, case and person suffixes, have Eskimo cognates, and Aleut phonology shows a number of correspondences with Eskimo, e.g. in certain conditions a reduction of p and m to h.

We will conclude here with the important question of the relation of Eskimo to other languages. What has been asserted with regard to racial relationship is just as applicable to the language: a mere division into linguistic stocks and dialects is fruitless; we would rather follow the line of developments, and obtain historical perspective. The prerequisite of this is, however, that we rid ourselves of the old idea of the families of languages as a forest with each stock as an independent tree. from which languages and dialects shoot out like branches and twigs. We saw how a new and peculiar race-type might be imagined to have risen out of heterogeneous components, and we shall see later that culture traits from widely separated regions can also meet and combine to create a new culture with its own special character. Similarly in the world of languages, hybrid languages can arise. The typical example is English, with its basic Anglo-Saxon and superimposition of Old French, of Old Danish, Latin and other elements. Borrowed words can gain such a firm footing that they become an essential component of a language, barely perceptible as foreign, as is the case with the large number of now indispensable Low German words that came into Danish towards the end of the Middle Ages. This much is obvious; but it must especially be noticed that grammatical forms and some sounds can also find their way from language to language, and indeed from stock to stock. Thus quite different linguistic stocks may have some features in common which have spread from one to the other or to both from a third. In other words, two groups of languages may in some respects resemble each other without for that reason having come from a common root. This is a fact of the most far-reaching importance. We shall see why at once.

The Eskimauan or Esk-Aleutian languages must, in the present stage of our knowledge, be looked upon as a separate family, which neither in vocabulary nor grammatical construction afford sufficient evidence for assuming that they have had the same origin as any other group. Sauvageot's attempt to relate them with the Uralian languages (i.e. Finnish and Samoyedic) must be considered as unsuccessful. However, attention has often been drawn to the Eskimo formation of plural and dual by the terminations -t and -k, which are paralleled by Uralian forms, and Bergsland claims that through Aleut the structural similarity between Esk-Aleutian and Uralian becomes still more obvious. The whole problem has been put in a new light by the Swedish linguist Collinder according to whose theory the Uralian languages show affinities to that of the Yukagir, a small Palaeo-Siberian tribe in the

Kolyma District, and the question therefore deserves a close re-examination. Strange to say, striking parallels to Indo-European have also been indicated, but at the same time it has been emphasized that they do not necessarily involve any relationship.

Some sounds may well be imagined to have spread outside their original areas. Just as South Africa is the land of the click sounds, despite the fact that the languages fall into three otherwise independent stocks, the languages of the north-west coast of America are, for instance, noted for an exuberant development of the k and l sounds, whether the languages are genetically connected or not. In Tlingit there are, for instance, four l sounds, in the Haida language no less than five. We have seen that Eskimo has two of each kind (k and q, sonant and surd l). Now whereas the difference between k and q is fundamental to the entire phonetic system of the language, the distinction between voiced and unvoiced l is much more superficial, and it is not impossible that the latter in reality may be only a 'borrowed sound' from the languages of the North-west Coast Indians. For surd l plays only a very subordinate part in the Central dialects, whereas it is of frequent occurrence in Greenland and Alaska. Moreover, this distribution, broken in the middle, is common to a number of elements of culture which without doubt were first absorbed into the Eskimo culture in the west, and the natural inclination is therefore to regard the phonetic peculiarity in the same manner.

Finally, there are of course in Eskimo a number of loan words, not only modern ones such as 'coffee' and 'tea', but a few of possibly earlier origin. At any rate the likeness between certain Greenlandic words (sava, sheep; nîsa, porpoise, etc.) and the corresponding Norse (savðr, hnísa), which may have been absorbed into Eskimo in the Middle Ages, is striking. But why is it that we find so many loan words, for instance from Russian, in the Alaskan dialects, whereas both the Central Eskimos and the Greenlanders up to now have preferred to coin their own designations for new concepts? Is it because the Alaskan Eskimos from early times had contact with many tribes of different linguistic and cultural standing and thus acquired a greater susceptibility to foreign ideas? An investigation into loan words with reference to American and Siberian languages would be of the greatest importance, especially to culture

history; but in this question we have, unfortunately, not got beyond the first groping.

In another respect, however, linguistics has made important contributions to the history of culture. Rink has shown that the words for concepts concerning the sea, aquatic mammals and their hunting, are everywhere the same. From this he concludes that the Eskimos still formed a single coherent group when they emerged on the coast for the first time, and also that they evolved their peculiar culture under these conditions to spread only at a later period. Even if our views of the development of Eskimo culture differ from those of Rink, his conclusions are nevertheless of the greatest historical importance to Eskimology. It was by means of Rink's sound scientific work that a road was first cut through the jungle of fantastic speculation that threatened to smother the history of the Eskimos entirely.

CHAPTER IV

The Struggle for Food

The struggle for existence must be adapted to these, and it is worth noticing at once that the means employed are, on the whole, the same throughout the entire Eskimo territory. As one or another set of conditions predominates, particular methods increase in importance, and thus different phases of culture appear; but the differences are of degree only, not of essential pattern.

It is the sea rather than the land that on the whole conditions the life of the Eskimos. Only a very few tribes live away from the coast, and of these still fewer are really independent of the sea. In most districts the Eskimos possess only a narrow strip of coast, with either hostile peoples or the inland ice behind them and the sea before them. The large aquatic mammals - seal, walrus, and whale - provide them with their most important food, blubber for lamps, skin for clothing, boat coverings, harpoon floats and thongs, and to some extent sinews for sewing thread, as well as bones and ivory for implements. Most of them also get their wood either entirely, or to a great extent, from the sea, even if almost all the mainland Eskimos fetch some from the northern offshoots of the boreal forests. The Yukon and Mackenzie bring down enormous quantities of driftwood which is later scattered over large parts of the Arctic coast; from the river systems of Siberia timber is carried by ocean currents across the Polar Basin and down the east coast of Greenland, round Cape Farewell and onwards up along the west coast. In the Danish National Museum there is an idol of wood that drifted ashore at Godthaab in Greenland, which exactly corresponds to another that has stood in an Ostyak sacred grove by the river Ob in Siberia.

Just as the sea plays a more important rôle than the land in the life of the Eskimos, so winter is the dominant season. But it is not extremely low temperatures that characterize the Arctic winter. In the forests of North-east Siberia the temperature sinks lower every winter than it does anywhere on the Arctic coast, and a city like Winnipeg, one of the world's greatest wheat centres, regularly has degrees of cold that can compare with those in the Arctic. It is the *length* of the winter, coupled with the feeble summer heat, that dominates the climate, and it is in the adaptation of their winter life to the sea, or rather to its ice, that the Eskimos have reached their most distinctive cultural achievement.

For the Eskimos it is a question of getting through the winter, and the principal condition of their existence is therefore the opportunity for hunting aquatic mammals at this time of the year. From Bering Strait to northern Greenland the ringed seal (Phoca foetida) and the barbed seal (Erignathus barbatus) are by far the most important objects of their hunt. The ringed seal inhabits the waters of the deeply indented fjords, where it remains under the ice throughout the winter. Both species keep breathing holes open in the ice; they cannot exist under old ice, however, except where tides or currents make some open water. The walrus (Odobenus rosmarus in the east, and O. obesus in the Bering Sea region), absent from the sounds of the North-west Passage, does not scratch breathing holes for itself, but can ram a hole in the winter ice, even if this ice is thick enough to bear a man. The Eskimo's winter home therefore must be near an even layer of ice over water of fair depth, or in districts where the ice is broken by current holes and tide-water lanes; on the other hand shallow coasts, where the pack ice towers up, or sounds choked with thick drift ice many years old, place almost insuperable obstacles in the way of habitation.

Other seals, such as the spotted seal (Phoca vitulina) that occurs sporadically in both the eastern and western parts of the Eskimo area, the bladdernose (Cystophora cristata) and the saddle-back (Ph. groenlandica) in the Atlantic waters, and the fur seal (Arctocephalus ursinus), sea lion (Eumetopias jubatus), and ribbon seal (Histriophoca fasciata) on the coasts of Alaska, avoid firm ice and therefore only approach the shore periodically. The same is true of the whales, including the right or Greenland whale (Balaena mysticetus), the various kinds of fin whales (Balaenoptera rostrata, B. musculus, Megaptera boops, Rachianectes glaucus, etc.) and the smaller species such as white whale (Delphinapterus

leucas) and narwhal (Monodon monoceros). It is only in the marginal regions, where the winter ice is no longer firm, that these animals are of any importance to man, and here habitations are linked not with the ice of the fjords but with the sounds and islands by the open sea.

In winter the ice margin along the Arctic coast usually extends so far out to sea that only the black frost-mist on the horizon reveals the presence of open water. Fjords and sounds are entirely frozen over. A means of quick and easy transportation to the hunting grounds is therefore an essential to the Eskimo, and especially to the Eskimo of the Central region, where permanent winter houses are unknown and where the whole settlement must move at intervals to new sites. Thus the dog sledge is important here, not only for ordinary communications but for the Eskimos' very livelihood.

The Netsilik Eskimos sometimes transport their belongings by dragging them along in a polar bear skin and the Alaskan inland tribes in a frozen moose skin, and it is probable that this may have been the forerunner of a kind of sledge made of strips of baleen (whalebone) tied together, resembling the toboggan of the northern Indians, which was formerly used in North Alaska and on Southampton Island. The toboggan, the whole bottom of which rests upon the ground, is less suitable for use on ice and hard snow than the sledge with runners, and, whilst the former is indispensable to the Indians in the loose and soft snow of the forests, it is the latter that is of greatest importance to the Eskimos. There are two types: one simple, the other a more elaborate built-up form; the fundamental principle of both is, however, the same in that all the parts are lashed or mortised together so that the sledge may give at the joints. The need for flexibility when driving in pack ice will be obvious.

The simple type is found in its most primitive form among the Central and Labrador Eskimos. It consists of a pair of straight, heavy runners connected by cross-slats lashed on with seal thongs. Among the Caribou Eskimos, who live near the timber line, and who travel often and far, these sledges are of really formidable length; some are over ten yards long although only about half a yard wide. To make it at all possible for the dogs to draw the enormous weight of both sledge and load, the lower surface of the runners is covered with a thick layer of peat paste. This is

brushed over every morning with lukewarm water, which forms a thin crust of ice and so reduces friction to a minimum. In spring and autumn the peat layer must be replaced by shoes of whalebone. The peat shoeing means such an ultimate saving in labour that a little extra manœuvring in driving is willingly undertaken; for of course care is necessary. Grit, or freshwater ice that is bare of snow, rubs the ice crust off at once, and if the sledge runs against a stone, there is the risk of the whole shoeing breaking off. For this reason the Eskimos often carry a bag of peat mould with them on long journeys. We ourselves had no peat mould, but found custard powder and porridge most efficient substitutes! Manœuvring with these long sledges might seem difficult; but in reality only a short length of the runners rests upon the snow, as their undersides taper up the front and back. The heaviest load is placed on the foremost crossslats, i.e. just in front of the middle of the sledge, so that the whole of the rear part can swing freely.

In the woodless regions around the Magnetic North Pole a wooden sledge is such a precious possession that a wife may be bought for one, and the Eskimo must make his sledge of whatever material is at hand, the runners, for instance, often being made of rolled-up and frozen musk-ox skins. The Danish National Museum possesses the runners of one of these sledges from Pelly Bay; the cross-slats could not be brought home for they were made of frozen meat!

In Baffin Island and Greenland the sledges are of the same essential type as those found among the Central Eskimos, but shorter, wider, and, at any rate in Greenland, of much lighter build. In addition, they have at the back a pair of uprights made of wood or caribou antlers; these steady the load and are of great assistance in steering. Here the heaviest load is placed at the rear, for this sledge, unlike that of the Central Eskimo, does not swing freely. Whereas the latter is very suitable for transporting heavy loads over even ground, the West Greenland sledge, which must be capable of being used in mountainous terrain, on pack ice and on ice that is cut up by currents or is insecure, is a splendid all-round appliance. The sledge of the East Greenlanders is very small – only about a yard and a half long – because it is not used for long journeys but for bearhunts and for conveying the skin boats out to the edge of the ice.

The simple type of sledge described above as consisting of

runners and cross-slats only, is used by the Eskimos west of Coronation Gulf for transporting boats and for bringing home the spoils of the chase; for travelling purposes, it has been superseded by the built-up, sleigh-like form, which has obviously come from Siberia where it is common among all northern tribes. It has slender, well-turned-up runners, and arched cross-bars which support a grating seat with side rails. Although I have had no opportunity of using this sledge, I am inclined to think that in certain respects it is superior to the Greenland type; but there is no doubt that it is more complicated and laborious to construct, and is perhaps rather frail.

The Eskimo dog harness is simple and consists of two thong shoulder loops, either crossed or, better, parallel and connected by cross-straps. By this means the dogs pull with their shoulders and chest in contrast to those of some Siberian tribes, which have a barbaric loin harness, which puts the weight on the hindquarters of the dog. Among the Eskimos there are two methods of teaming, corresponding to the two most important types of sledges. In the east, each dog has his own trace, so that the team spreads fanwise in front of the sledge. In order to offset the resultant loss of pull the traces are made of different lengths in the Central area and Labrador, and they are so long in Labrador that, at first glance, it seems as if dogs and sledge had no connexion with each other. A Labrador trace in the Danish National Museum is no less than nineteen yards long. A specially trained leader, usually a bitch, has the longest trace; in Greenland, where leaders are not used, all traces are the same length. This leader, by the way, must not be confused with the 'boss', the absolute ruler of the team, who attains his position by fighting for it and asserts it with bloody tyranny. Among the Western Eskimos there is only one long trace, and to this the dogs are yoked in pairs with short thongs.

They look magnificent, these beasts with their thick fur, pointed snout, erect ears, and curved brush; but they are a fierce, pugnacious and ungovernable horde, and nothing edible, even thongs or old boots, is safe within reach of their teeth. In summer they have for the most part to get their food where they can, and even in winter it is often scanty enough when there is a shortage of supplies in the camp. When harnessed they are guided exclusively by cries or the whip, for which they have a deep-rooted respect; for if the Eskimos are not so cruel to their

dogs as are the northern Indians, they are by no means gentle masters.

The whip, which by the way is rare in the west, where the method of teaming makes it superfluous, is a terrible weapon. The Eskimos know to a hair's-breadth how to hit not only the particular dog, but the very part of it they want to reach. While the Fifth Thule Expedition was at Repulse Bay it happened that a woman, creeping out of a snow-house, was inadvertently hit by the whiplash on the rebound and received a deep gash across the face. The whips of the Labrador and Central Eskimos are so long and heavy that the lash must be vigorously flung out. With the light Greenland whips it is less a matter of strength than suppleness of wrist. A skilful dog driver, however, seldom whips his team and, if he is a first-class man, he is even reluctant to talk while driving for fear of distracting the dogs; for his dogs are responsive to the slightest sign. On the whole the Greenlanders are far superior as dog drivers to the Central tribes, among whom the wife has often to run before the sledge in order to encourage the team to do the work that cannot be got out of it by means of a shower of cries and whip strokes alone.

After a few hours' run the traces have often become so entangled that it is necessary to stop and clear them. In severe weather this is at best a cold pleasure, as it must usually be done with the bare hands; sometimes, however, teeth must also be made to help and, in view of what treatment the traces get from the dogs, the word pleasure can hardly be used. On the whole, a great many people living in civilization have the strangest notions of what sledge driving means. They think that the driver simply sits down on the sledge, cracks his whip, and away we go! Actually it is a steady drudgery, rarely moving on long journeys faster than one can walk alongside the sledge which as a matter of fact is nearly always done to relieve the dogs. And if the trail lies across hummocky ice and the sledge is heavily loaded, progress is agonizing. The dogs toil and pull, but the sledge will not budge. Everybody lends a hand, an encouraging cry to the dogs, a swishing whip . . . not an inch does the sledge move. Kick that snow away in front of the runners! Slowly, very slowly, the sledge is hauled over the ice barrier, hesitates a moment just at the top, and then rushes down the other side to burrow its nose under a projecting piece of ice. Bring a knife here! Again the sledge glides forward a little,

again it stops. Jumping from block to block, one stumbles knee deep into a fissure that has been covered with a treacherous crust of snow. Up again! The dogs wheeze and howl with the strain. Sometimes the sledge goes too fast, then perhaps it comes to a dead stop. Sometimes the trail is entirely blocked, and you have to clamber up on to the ice barrier to find a way out. I knew a clergyman – who shall be anonymous – who maintained that oaths used when sledge driving will not be included in the eckoning on Judgement Day!

Just as the sledge is the Eskimo's chief means of getting out to the hunting grounds, so the harpoon is his principal hunting weapon. In its essentials the ice harpoon is everywhere the same. It has a loose head fastened to a rather short line of seal thong which is held in the hand. The head consists of an antler or walrus tusk stem with a blade that is nowadays of iron, but formerly, if not entirely absent, was made of stone or hard bone. The most widespread form has a thin stem with a spur at the base. In the east there are various other types as well, but they all work in the same way; the shock of the thrust loosens the head from the shaft and on being pulled by the line it turns sideways in the wound, and 'anchors' the line. The shaft may be of wood, antler or narwhal tusk and the butt end often holds a powerful bone pick for cutting holes in the ice. In Alaska the ice harpoon has a loose 'foreshaft', but this is really a characteristic of the kayak harpoon.

If severe frost without snow suddenly appears in the autumn, the ice in protected fjords may become as smooth and shining as glass. Then the Eskimo concentrates on what is known as smooth-ice hunting (quasasiorneq), which he considers to be one of the most pleasant forms of hunting aquatic mammals. The hunter ties on a pair of sandals of polar bear skin or longhaired dog skin so that he may walk noiselessly on the ice. In still weather the snorting of the seal at the breathing hole can be heard a long way off, and it is towards this sound that the hunter directs his steps. When once a seal decides to breathe, he does it thoroughly and therefore remains at the hole for some time. Every time the sound tells the hunter that the seal is taking a breath, he hurries forward: when it stops, he stands still so that the faint sound of his footsteps shall not betray him, until at last he reaches the hole and thrusts the harpoon into his quarry.

The walrus, which, as already stated, does not scratch breathing holes, remains near the margin of the ice or at cracks not far from the shore, where it seeks clams. For this animal a specially heavy harpoon is needed. As soon as the walrus is struck the hunter thrusts the harpoon shaft down into the ice, throws a turn of the line round it, and so moors the huge animal. These are dangerous moments, however; for if an arm or leg gets caught in the line the hunter is inevitably pulled into the water and drowned. Every time the walrus comes up to breathe, a lance is swiftly thrust into it until at last it succumbs. In order to secure the monster, which may weigh up to a ton, the Eskimos employ an ingenious tackle: they run a strong seal thong through a pair of holes in the animal's hide and through a similar pair which they chop in the ice.

The walrus is not so timid as the seal, so that this method can be continued after the snow has fallen; but with the arrival of snow, smooth-ice seal hunting ceases, for the slightest creak on snow scares a seal away. As long as the skirt of shore ice is still narrow enough for open water to be easily reached with the sledge, seal hunting is carried on from the edge of the ice, where the hunter hides behind a screen of ice blocks or tries to entice the inquisitive seal by whistling down into the water or by scraping the ice, for which purpose the Alaskan and formerly also the Greenland Eskimos use a special little implement resembling a seal flipper with claws.

Later on, when the ice edge moves farther and farther away from the coast, the tedious waiting method at the breathing holes begins. This procedure, which has become known in literature as the máupoq method, is known everywhere from Greenland to Bering Strait wherever natural conditions permit its use; but it is most elaborately developed in the regions round the North-west Passage. The hunters leave the snow-hut camp at dawn, each with his dog on a lead, to smell out the breathing holes of the seals. As soon as a breathing hole is found, the hunters all run to it, each trying to hit it first with his harpoon; the one hitting the mark has the hunting rights to that place.

In the late winter the breathing hole only shows itself in the snow like a molehill, formed of rime from the breath of the seal, with a small opening, about an inch in diameter, leading

¹ Actually not a good name. It is rare, at any rate in Greenland (nigparpoq is more common), and the substantive form in not máupoq, but máuneq.

down into the cavity in the snow covering which arches over the wide channel in the ice through which the seal comes up. But as soon as the seal leaves the breathing hole a thin layer of ice forms on the water, and therefore the first thing that the hunter does is to remove the uppermost layer of snow with his knife and to make a hole in the ice with the pick on the butt of the harpoon shaft. All pieces of snow and ice are carefully removed with a narrow scoop of musk-ox horn, and then, by means of a long, slightly curved antler probe, the position of the hole is examined. It is most important to find out whether the hole is directly above the channel in the ice, for if this is not the case there is a risk of making a faulty thrust. This accomplished, the mound must be built up again and, if the snow is drifting, a small tubular screen of skin is put over the hole to prevent its being filled with snow. Finally, the hunter places in the hole an 'indicator', either a very thin point of bone which is fastened by a string to another that is made fast in the snow, or one or two small pieces of swan's-down, laid on a small piece of frayed-out sinew hanging freely in the hole. The slight movement of these indicators immediately reveals the arrival of the seal. None of these special implements - breathing-hole scoop, probe, screen and 'indicator' - are known outside the Central area.

When at last the preparations are finished, hour after hour may pass without anything happening, for a seal always has a number of breathing holes; nevertheless, the hunter has to hold out, and this despite a temperature that not infrequently falls to -50° or -60° F. What is more, the slightest creak in the snow scares the seal away. In Greenland and northern Alaska the hunter sits upon a small stool, elsewhere on a block of snow. . . . When at last the indicator moves, the Eskimo rises cautiously, raises the harpoon over the hole, and down shoots the weapon through the narrow opening. Shaft and line he retains in his hand, and it is now an easy matter to kill the animal and pull it up on to the ice.

In Greenland outside the Thule District and in the region round the magnetic pole another ice-hunting method is known, called 'peep hunting' or itsuartorneq. Two holes are hewn in the ice side by side. At the smaller stands one man with a harpoon, ten or more yards in length, that is held down in the water. At the other hole lies another man, with a cover above his head,

peeping down under the ice and with one hand guiding the harpoon held by his fellow-hunter. He whistles and whispers, and at the same time the harpoon is moved up and down slightly, thus making two small pieces of bone, that are fixed near the harpoon head on split feather shafts, vibrate. This is more than the seal can stand. A cautious $k\ell!$ or $k\ell q!$ comes from the watcher when the seal is under the harpoon, a thrust – and it is caught.

When the sun at last begins to increase in power after the long winter, and the seals feel the call of spring, they scratch the snow covering away from their breathing holes so that they can clamber up on to the ice and bask in the sun. They lie sleeping, but every half-minute or so they raise their heads and peer about them. Such a seal is called an $\tilde{u}toq$, and $\tilde{u}toq$ hunting is practised wherever conditions allow. The ice-hunting harpoon is still used, though for this purpose it may be equipped with an immensely long shaft. The hunter, who is himself clad in a dress of sealskin, carefully crawls towards the animal as it sleeps; every time it moves the hunter, with astonishing skill, imitates all the antics of a seal, until finally he gets so near to his prey that he can use the harpoon. In the west the hunter also uses the artificial seal flipper already mentioned for scratching on the ice and thereby reassuring the animal.

To-day the rifle is used almost everywhere for this hunting; deadly accuracy, however, is necessary, for if there is the smallest spark of life left in the seal it manages to wriggle back into the breathing hole and disappears. In Greenland the hunter conceals himself behind a so-called 'shooting screen', a piece of white cloth stretched in front of a small sledge, which he pushes along in front of him, crawling along the ice. The shooting screen is also known in Alaska, in a more improvised form.

Seal hunting from the ice is also carried on with a net. This method has a peculiar distribution which we shall find applies also to several other elements of the Eskimo culture. Nets are used among the Western tribes and in the east, i.e. in Greenland and Labrador, but are not known at all nowadays in the Central area. They are set vertically under the ice, preferably at open places where the seals congregate. Although pre-European, net hunting in Greenland has only flourished since the Danish colonization. In Alaska, however, aboriginal net hunting has

been as important and skilled as breathing-hole hunting with the harpoon in the Central regions. In the west nets are also stretched out horizontally below the breathing hole. This advanced development makes it probable that net fishing is oldest in the west, and this is confirmed in other ways.

What the sledge is to ice hunting, the kayak is to hunting in open water. Few vessels among aborigines, except perhaps the best canoes of the South Sea islanders, equal the graceful, slender kayak or, as it is called in Alaska from a Russian word, baydarka.¹ It was perhaps the first element in Eskimo culture to make an impression upon the European mind. The skin boats referred to in the sagas about the 'Skrælings' in Vínland may have been kayaks, and Claudius Clavus tells that he saw the Greenland pygmies 'caught on the sea in a little skin boat which now hangs in Nidaros cathedral'. As he mentions at the same time a long skin boat, obviously a 'women's boat' or umiak, the first reference must be to a kayak.

The skeleton of the kayak consists of a large number of arched ribs mortised at the top into two planks which serve as gunwales. These gunwales are bound together fore and aft, where stem and stern posts jut out, but are otherwise laterally supported by cross-beams. An odd number of long thin laths are lashed on the outside of the ribs with seal thong or strips of baleen, and in most places a longitudinal lath is placed along the top of the deck beams.

This slender wooden frame is entirely covered with tightly fitting skin, from which the hairs have been plucked, leaving only a central opening – the 'manhole' – surrounded by a wooden coaming in the deck. On the Aleutian Islands and in southern Alaska there are also kayaks with two openings, while kayaks with three openings are a Russian invention, intended for the comfortable conveyance of a passenger and two paddlers. When the seal hunter on the Bering Strait or in Greenland has lashed his water-proof skin jacket round the coaming and about his wrists and face, he is so much a part of his kayak that he will purposely allow himself to capsize while a heavy sea rolls over him. He comes up again by means of special movements with the paddle, and there are some men who can manage with their arms alone if the paddle should be lost. The missionary Cranz

¹ The diminutive of baydara, the Kamchadal name for the large, open skin boat, the umiak of the Eskimos,

enumerates no less than ten different ways of getting on to an even keel again.

The paddle is light and double-bladed except on the stretch from the Pacific coast and Bering Sea eastwards to the Mackenzie delta, where ordinary single paddles are also used. But as the double paddle is found side by side with these the single paddle must undoubtedly be regarded as an implement that has made its way into the region at a later period. The Pacific Eskimos always use the double paddle when more than ordinary speed is required, for instance on the sea-otter hunt.

There are many special and localized forms of kayak, so that it is possible, with a little practice, to determine at once not only the tribal group from which a kayak comes, but even, in Greenland for example, the particular district. The kayaks of Bering Sea and the Aleutian Islands have arched deck beams so that the deck slopes roof-like down on both sides, and in some districts there is an opening in the stem where the end of the harpoon shaft rests. Along the North-west Passage and among the Caribou Eskimos the kayak is extremely long and narrow, with peculiar, long and pointed stem and stern, and in former days this type was used on the west coast of Hudson Bay, where now, as in fact among the Asiatic Eskimos too, it has passed quite out of use. In Labrador, Baffin Island and the Thule District, on the other hand, the kayak is both broad and blunt; that the Thule form resembles that of the Baffinlanders so closely that they can hardly be distinguished one from the other is due to the fact that at Thule the kayak had also fallen into disuse on account of special circumstances and was only reintroduced as late as the eighteen-sixties by immigrants from around Pond's Inlet. The kayak of West and East Greenland is again light and elegant, that of the East being distinguished by its upturned stern resembling in this the kayaks of the northern part of West Greenland.

A Greenlander would only have a pitying shrug of the shoulders for the strange barges that are honoured by the name of kayak on certain civilized coasts. Paddling in a kayak is like riding a bicycle. In smooth weather and as long as it is on the move, anybody with nerve can splash about in one. But a rough sea or a sudden halt soon betrays its uncanny inclination for capsizing. The most difficult to manage are probably the long, narrow kayaks of the Netsilik and Caribou Eskimos, which

are quite round-bottomed into the bargain. One of our Polar Eskimo companions on the Fifth Thule Expedition, a splendid kayak man himself, but a stranger to this type, wanted to try one, and capsized immediately.

It is not only the great speed and silence of the kayak which make it the ideal hunting appliance; its extreme lightness is equally important. In most regions it is so light that a man can without much effort carry it on his head, the coaming resting against his forehead. In this manner he wanders over the ice out to the open water or overland from fjord to fjord and thus often saves himself long journeys.

Fastened to the deck under thongs stretched across it lie the hunting implements, of which the kayak harpoon is the most important weapon for hunting aquatic mammals. It usually differs from the ice-hunting harpoon in being more slender, intended as it is for throwing, and in lacking the ice pick at the butt. The principal difference, however, is that the neck or foreshaft, a slender piece of bone or ivory on which the loose head is placed, is not fixed into the shaft but only held firmly to it by a tight thong. The two parts are in this manner joined with a kind of universal joint. The moment the quarry is hit, the foreshaft bends over so that the harpoon head slips off and remains fixed in the wound, the released shaft floats on the surface of the water where it can be picked up.

In the west the head is of the same thin form as that of the ice-hunting harpoon, whereas to the east it is usually wide and flat, a form which, strangely enough, crops up again as far away as the river Amur in Asia. It is everywhere fastened to a very long and strong line of seal thong, at the other end of which is a large, inflated float made of an entire seal skin. In order that it may not get entangled, which might be fatal to the hunter, the harpoon line prior to the throw lies carefully coiled upon a kind of tray, the 'kayak stand', which in Greenland is raised from the deck on three legs, but elsewhere lies on it.

The harpoon is an implement which reveals the ingenuity of countless generations, and in Greenland, where kayak hunting is one of the principal occupations, it is particularly highly developed. In that region there are two kinds of shaft, one long and slim, the other shorter and furnished at the butt end with a pair of flat 'wings' of bone (probably in origin a pair of real feathers). The Greenlanders have in addition adopted the

'spearthrower' or throwing board for harpooning. This remarkable implement is found sporadically in many parts of America outside the Eskimo region, including the old civilizations of Mexico and Peru. It is also still in use in Australia and New Guinea, and French excavations show that it was known to the Upper Palaeolithic peoples of the Ice Age in Europe. The ordinary Eskimo throwing board is a flat board with a longitudinal groove on the upper side and a bone peg at the rear. The shaft of the weapon lies in the groove and in throwing, the board, which is retained in the hand, acts as a prolongation of the arm and thus considerably increases the force of the throw.

It is only in Greenland that the throwing board is used with the big kayak harpoons, which elsewhere are thrown with the hand alone. It is, however, in general use with a lighter and more slender kind of harpoon, the head of which is also detachable, but unlike those referred to above, does not turn sideways in the wound but retains its hold by means of a number of barbs. With this weapon the line is short and is fastened to the shaft itself, to which a small bladder is often tied. The large float is not used. These barbed harpoons, or 'bladder darts', are mostly used for small scals. They are especially common on the Aleutians and in southern Alaska where, curiously enough, the shaft is feathered like an arrow at the butt.

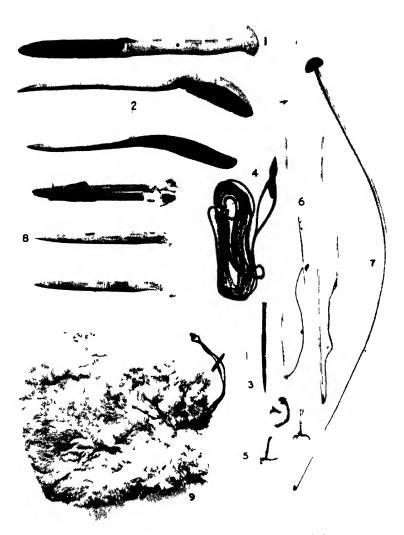
When the hunter has struck the seal with his harpoon, he stabs again and again with the lance until at last it dies. In contrast to the harpoon, the lance has a point which is rounded at the base, originally of stone and now of iron, so that it slips easily out of the wound and can be recovered, readjusted and thrust in again. But among the Eastern Eskimos the point is set in a loose foreshaft of bone which, like that of the harpoon, breaks away when the animal is hit; the Greenlanders, who have, as already mentioned, made many small improvements in the kayak equipment, usually make use of a throwing board when casting the lance, as with the harpoon. At last the seal receives a mortal thrust with a knife or short lance and is towed home alongside the kayak.

The hunting of aquatic mammals from the kayak as described here is distributed over an area that corresponds almost exactly with that of ice hunting with the net, i.e. it is entirely absent in the North-west Passage, but is to be found both to the east and west of it. The same applies also to seal hunting with nets in open water – a method which is not very much used anywhere, however – and to the last form of aquatic mammal hunting: whaling.

For this purpose the Eskimos use the big skin boat, the umiak or the baydara. In Greenland nowadays the usual name for this craft is 'women's boat', because, since the large whales have been almost entirely exterminated, it has sunk to being used exclusively as a travelling craft. The wooden frame of the umiak is rather like that of the kayak; but it is flat-bottomed and open at the top. A typical West Greenland 'women's boat' is about ten yards long and can take a considerable load. It is a gay sight to see one of these vessels on its way down a sunny fjord. It is packed to the gunwale with skin tent, boxes, cooking pots, skin bags full of clothing or blubber, big pieces of bloody seal meat, children, and puppies. The women row with short, quick strokes and often lighten their labour with song, but strangely enough, as with the drum accompaniment to their folk songs, never in time with the strokes. In a fair wind they hoist a sail of gut skin or, at Bering Strait, of mats, which gives an East Asiatic impression. In the stern sits the head of the family with the steering oar, and a number of men follow in their kayaks like torpedo boats escorting a dreadnought.

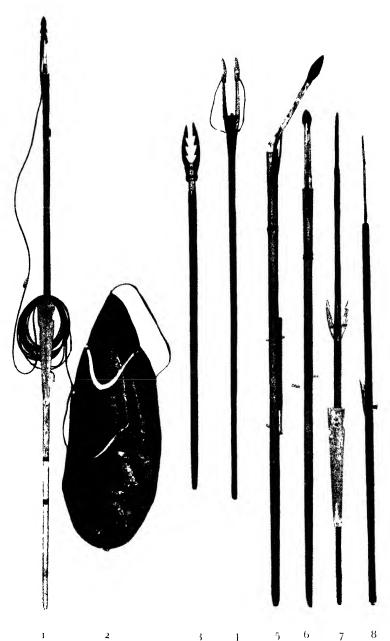
When whaling was at its height in the old days everything was different. The whale did the settlement an honour by allowing itself to be killed, and therefore 'they dress up in their best as for a wedding, otherwise the whale will fight shy of them; for he cannot bear uncleanliness', as Bishop Hans Egede has expressed it, and when in 1922 I was present at a whale hunt among the Aivilik Eskimos, the women all wore a brow band with a piece of white quartz in honour of the rare guest. To return to Greenland: several floats were tied to the gunwale of the umiak to prevent it from capsizing. The men were clad in special combination suits (see page 116) to keep themselves above water in case of accident, and they paddled instead of rowing with the usual oars so that there should be as little noise as possible.

In the bow stood the harpooner with his weapon, similar in principle to the kayak harpoon, but of course bigger and heavier, and equipped with a drag anchor as well as a float. On the Pacific the whaler occupies an honoured position in the



Netsilik implements for hunting at the breathing-holes

1 Snow knife 2 Scoops of musk ox horn for removing rec fragments 3 Bone needles for closing the wound 4 Harpoon head and line 5 Seal indicators of swan's down 6 Seal indicators of antler 7 Antler probe for investigating the shape of the hole 8 Wooden supports for the harpoon during the waiting 9 Deerskin bag also used for standing upon the ice



West Greenland implements for hunting and fishing in open water 1-2. Harpoon and float. 3 1. Fish spears. 5 6 Scaling lances. 7 8 Bird darts

National Aluscium, Copenhagen

community. The novice is trained by the other whalers and initiated into the secrets of their task. The whalers are said to have killed people secretly and boiled up their fat to make poison, though actually the toxic effect was due to the use of an aconite extract. The cooking took place in sequestered spots, and some rock paintings in Cook Inlet and Prince William Sound may possibly have connexion with such rites. Poison smeared on the hunting weapons or poured into the water at the entrance of the bay where the hunt went on was said to prevent the whale from escaping. As a rule the Pacific Eskimo used no proper whale harpoon, but a lance with a long, thin point of slate, which was intended to break off in the wound and remain there. It is a remarkable fact that whales die comparatively quickly from even very small wounds, but of course it is a piece of luck if the body of the whale drifts into the grounds of the hunters who actually killed it. Here again the Pacific Eskimos rely upon chance and their magical charms; for there is on the whole no animal, either among these or other Eskimos, whose hunting is so hedged by strict taboo, magic formulas and the use of amulets. And considering the size of the animal and the dangers attached to the hunt, this is not surprising.

Life in the Arctic makes great demands upon animals no less than upon man, and it has been pointed out that those mammals which are able to live there belong to species which are the most highly developed of their kind, and that only a few have stood the test of Arctic conditions. This fact emerges clearly enough with regard to the aquatic mammals, but is even more obvious among the land animals. Compared with the hunting of aquatic mammals shore game is therefore as a rule of small importance, except of course among the few inland tribes who are compelled to live on them entirely, and to a certain extent among all the Central Eskimos. It is significant that the snowshoe, the most important means of communication on land among the Northern Indians, has never become really naturalized among the Eskimos. Although most of the tribes outside Greenland do sometimes have snow-shoes, they are never used for hunting except in northern Alaska and their shapes show that they are mostly local imitations of those of their Indian neighbours and not genuine Eskimo appliances.

A kind of transition between aquatic and land game is found

in the now almost extinct sea otter (Enhydra lutris), which was hunted with bow and harpoon arrow by a fleet of two-man kayaks. A similar transitional form is the polar bear (Ursus maritimus), which though a land animal belongs more closely to the sea in its mode of life. Living on seals it frequents the ice often far from land, and is only found in large numbers along certain stretches of coast, for instance in East Greenland, Southampton Island in Hudson Bay, and Banks Land, where it arrives with the drift ice. Before the introduction of the rifle the Eskimos killed it with lances after it had been surrounded and held at bay by dogs.

This method is also used for hunting the musk-ox (Ovibus moschatus), that living fossil of a past age, whose distribution is now limited to the most northern part of Greenland, the regions round the North-west Passage and parts of the Arctic Archipelago. On Canadian territory it is strictly preserved, and this law is respected by all Eskimos who come into contact with the whites. This is something from which Denmark ought to take a lesson, now that Scoresby Sound is inhabited and the rest of the east coast open to fur companies and so-called 'sportsmen'.

Although mountain goats (Oreannus montanus) and mountain sheep (Ovis Dalli) occur in Alaska, no land game equals the caribou (Rangifer arcticus) in importance. It is to be found almost everywhere, although in many places sadly reduced in numbers. West of Hudson Bay, however, the tundra still becomes a sea of antlers when the great migrations take place. In winter the caribou is sometimes caught in pitfalls dug in the snow; for bait the Eskimos use urine, the salt content of which is a favourite with caribou and reindeer, as every Lapland traveller knows.

The winter caribou is lean, and its fur is so thick that it is not of much use. The most important hunting seasons therefore are summer and, more especially, autumn, when a thick layer of delicate fat spreads over its back and the smooth hair covering of the skin makes it suitable for clothing. At these seasons it makes its way to certain crossing places on the fjords and rivers which bar its path; close to these the Eskimos lie concealed with kayaks and lances, and as soon as the herd is well out in the water, the boats shoot like arrows in among the defenceless animals and a veritable massacre begins. Sometimes a row of stone cairns is built, looking at a distance astonishingly like human beings, to frighten the animals down to a certain spot

by the river. Often this is not enough for the hunters, and they raise two converging rows, often miles in length, of stone cairns, or sometimes of poles topped with flapping gull wings. By long, round-about ways and with the greatest caution the women and children steal up behind the unsuspecting animals, until suddenly a pandemonium breaks loose, with wolf howls, shouting and the waving of pieces of skin. Blind with terror the whole herd flees at that characteristic, ground-covering trot which is so much faster than it looks, and, of course, everything is so arranged that it takes the road leading in between the fences. Once it has got there it does not dare break out again. In Alaska, where there is easy access to timber in the interior, the animals finish up in an enclosure of stakes; between these hang snares of twisted thongs, in which the scared animals get caught by their heads and antlers and tremblingly await their fate. Perhaps this method has been borrowed from the Indians, who use it widely. It is simpler and more common for the hunters to lie concealed with bow and arrow where the rows of cairns meet.

The bow is a weapon that has put the skill of the Eskimo to a severe test. Often he has to be content with the drift-wood that the sea throws up on to the beach. Sometimes, however, even this is lacking, and he has laboriously to piece the bow stave together out of several lengths of antler. But this does not discourage him, for the welfare of both his family and himself depends upon the reliability of his weapons, and indeed the results often correspond to the effort expended. The simplest are single or double curved bows or one of the types used in the west, in whose boldly reflex points lies a kind of condensed power, but the Alaska type has a narrow grip and lanceolate wings. This form has real beauty and its design reveals the artistry of these people. But simple drift-wood or antler bows lack power. Drift-wood is not elastic enough; antler is no doubt much better, but can be much improved. The whole of the back of the bow is therefore covered with tightly stretched, plaited sinew cord, sometimes, in the east, with only one layer, most frequently with two layers, the uppermost covering only the middle of the bow. This sinew backing must not be allowed to get wet, for it then loses its power, and the bow is therefore kept carefully wrapped, like the arrows, in a quiver of skin or, among the Pacific Eskimos, sometimes of wood. If the cords do become

slack, they are parted with a marline-spike and retwisted with a little S-shaped bone instrument.

Only in certain cases can this reinforcement of the bow be dispensed with. Baleen is a sufficiently elastic material in itself, though, if anything, rather too pliant. Where whaling is carried on, or rather has been carried on up to our day, i.e. in the two marginal regions but not in the Central area, bows are sometimes made of two layers of baleen and are thus somewhat similar to the composite Siberian bows in which two kinds of wood are used.

The arrows have shafts of wood and heads of bone or sometimes of copper and nowadays of iron. It is of considerable archaeological interest that the bone head, after being softened in hot water, is trued and straightened with an implement consisting of a piece of antler with one or more holes in it. Exactly similar Stone Age implements of the Glacial Period have been found in France; but some archaeologists still encumber themselves with the ridiculous name of 'hâton-de-commandement' for these objects, although it is difficult to believe in Palaeolithic field marshals and although the correct interpretation of these implements has long since been known. The arrow shafts are feathered at the butt, originally with two feathers placed at a tangent, though in the west this type has been almost entirely superseded by the Asiatic custom of using three radial feathers. A hybrid form with two radial feathers is found among the Copper Eskimos.

When an Eskimo is about to shoot, he usually holds the bow on the slant, and grips the butt of the arrow with the extreme joints of index and middle fingers which at the same time pull back the bowstring. Shooting cannot be said to be accurate even if the arrow will go right through the animal when it does not strike a bone. Often the hunter has to get to within twenty paces from the caribou to be sure of his shot. But twenty paces and a caribou! Civilized hunters consider it sport to hunt caribou with long-range rifles.

The fox (Canis lagopus) is the foundation of the whole of the activities of the Hudson's Bay Company in Arctic Canada and plays a vital part in the Canadian Eskimos' supply of the products of the outer world. For this reason the fox has grown enormously in value in Eskimo domestic economy, where previously it occupied a very modest place. Consequently the

steel trap has everywhere replaced the old-fashioned stone traps, the dead-falls in which a stone fell down upon the animal, the quadrangular chambers which were closed with a falling door, and the peculiar tower traps which, like a pitfall, were open only at the top so that the fox could not escape after having fallen into it. Wolves, on the other hand, are hunted only when they become too bold near the settlements. In the winter of 1921 when I was at the Hudson's Bay Company's post at Chesterfield Inlet, most of the men were away with their dog teams. During this period the people dared not allow their children out to play after dark, because the wolves prowled about the snow-houses every night. They are killed in a most barbarous manner by a bait formed of a sharpened strip of baleen, rolled up and frozen into a piece of blubber. When the blubber thaws in the animal's stomach, the baleen straightens out like a spring and tears the intestines.

The land birds like the land animals are of small importance and among them only the ptarmigan is of any consequence. But on the coast there is every summer a whirr of ducks, geese, guillemots, gulls, and other sea birds. To hunt them the Eskimos, especially those outside the Central regions, make extensive use of the curious bird dart, which has either three projecting points or a single point in front and three side prongs placed at the middle of the shaft. By this means the throw has the effect of spread-shot. Almost everywhere a throwing board is used with the bird dart.

Birds are also caught with various rather simple snares, with bow and arrow, and with nets. Bag nets on long poles are used by the Polar Eskimo on cliffs, and the West Greenlanders stretch nets horizontally on the surface of the water. Gulls are also caught with 'hooks', i.e. a pointed bone enveloped in blubber and attached to a long cord. The most peculiar weapon for bird catching is, however, the bola. It is also found among some South American Indians, notably in Patagonia where it is the chief means employed in hunting the rhea and the guanaco on horseback. It is therefore remarkable that it appears again among the Eskimos. The bola consists of several heavy balls of walrus ivory, antler, or the like, each fastened to a cord and the ends of all the cords tied together. A bola skilfully thrown at a flight of birds winds itself about one or more and brings them down.

Fish is everywhere an important and in many places an indispensable addition to the food supply. The Eskimos use various kinds of leisters, harpoons, hooks, and nets. Fish which live in shallow water, especially salmon and trout, are sometimes taken with a simple snare placed on the end of a pole; but much more common is the leister, which consists of a pointed middle prong and two elastic side prongs of antler or musk-ox horn provided with barbs which hold the impaled fish. In summer, when trout come up into fresh water to spawn, the river mouths are closed at low water by means of stone weirs, leaving an enclosed area within which the fish are easily speared with the leister. Knud Rasmussen has drawn an animated picture of a fishing camp among the Netsilik Eskimos on King William Island, where a similar method was used.

Here most of the time was passed in idling, eating and sleeping. Work was restricted to ten minutes three times a day, when the fishing time signal was sounded. It was otherwise forbidden to approach the fishing place.

'This cry was answered with glad yells from every tent, and a wild race started down to the river, men, women and children from the oldest to the very youngest, some fully dressed, others half naked, and most of them bare-legged, despite the fact that the water in the river was icy cold. A short distance from the fishing place they all stopped; there all the leisters, with the long wooden shafts, had been left, and now four or five men moved stealthily, leister in hand, towards the lake from which the fish were to come. They had to take great care that their shadows did not fall upon the water; about twenty yards from the weir they suddenly jumped out into the water, and one could now see how the many fish that had collected about the stone barrier shoaled towards the weir; a few leaped over it and continued their way out into the other lake, but most of them swam through the weir gate into the enclosure. As soon as there were no more fish in the lake, a man jumped in and closed the weir with a large flat stone. This was the sign that fishing could begin and, without regard for the cold water or their clothes, which became soaked through, the whole impatient crowd poured into the river and began to spear the fish that had gathered in it, and darted in and out between their legs. There was no system in their fishing; it was all a question of who could spear the most. It was always a mystery to me that in this scuffle, where the leisters rose and fell here, there and everywhere, apparently quite at random, several toes were not lost. . . .'

As autumn advances and the ice begins to form, the leister is used from the ice on the lakes, the fish being enticed to the surface by means of a small, carved model of a fish jigged up and down in the water. Harpoon fishing from the ice, now only known to the inland tribes on the Barren Grounds, is however especially remarkable. It takes place from a small snow-hut, in which the Eskimo watches for the fish through a hole in the ice, the method thus very closely resembling the aforementioned 'peep hunting' for seals. An extraordinary combination of the 'peep fishing' method and fishing by means of a trap has been described by Giddings from the inland tribes on the Kobuk in northern Alaska. A line of holes is chopped in the river ice and small spruce trees with their branches intact are pushed through the holes and rammed into the river bottom, thus forming a barrier to the fish. A peep hole is then cut through the ice and a shelter erected where one of the fishermen lies watching for the appearance of the fish. As soon as he sees a shoal of whitefish approaching an opening left in the fence, a trap consisting of a net with a wooden frame is dropped through a slot previously made in the ice, and the catch is drawn up. The fact that 'peep' fishing, undoubtedly a very old method to which we shall revert later, is now in use at only two places, is probably a result of its having been replaced by ice fishing with the jig; this method is now used everywhere in the Central area, where the lakes contain a wealth of various kinds of fish (trout, whitefish, grayling, turbot, pike, tullibee and many others). The jig consists of an unbarbed iron hook, set in the under edge of an oval bone sinker. The bait is a piece of fish skin.

Fishing nets were originally known only in the two marginal regions, Greenland and Alaska; it is doubtful if they are pre-European in Labrador. Like seal nets, they are most common in the west where for instance they are used as seines, a method unknown in Greenland. Fish traps of plaited willow have a similar distribution but are not entirely unknown in the Central regions. One of these rare appliances, from the Copper Eskimos, can be seen in the Danish National Museum.

Deep-sea fishing in the proper sense is likewise only met with in the peripheral regions, Alaska on the one side and Greenland-Labrador on the other, where there are great numbers of cod and halibut. Cod are caught with a jig with several hooks on a bone stem with an oblong sinker of soap-stone. The halibut, which can reach the length of a man and weigh up to a hundredweight, is taken on a special kind of composite hook probably derived long ago from the culture of the North-west Coast Indians. It has a straight, barbed point lashed to a bent stem of wood or bone; the line is of joined strips of baleen and is very long, for the halibut lives at considerable depths. The Pacific Eskimos also make their fishing lines of a certain alga (Nereocystis priapus).

The flora is too sparse to make any great contribution to the food supply, and one of the favourite kinds of 'vegetable' is actually obtained through the fauna, namely, the fermented and rather sourish contents of the caribou paunch, which is everywhere looked upon as a great delicacy. The Eskimos also eat the berries of the black crowberry, marsh whortleberry, cloudberry and other Arctic fruits, the roots of certain plants, the stalk of the aromatic angelica, various algae, etc. The luxuriant vegetation in southern Alaska includes a considerable number of edible plants (Fragaria chiloënsis, Rubus spectabilis, R. chamaemorus, Ribes hudsonianum, Fritillaria camtschatcensis, etc.). The Eskimos even have a kind of chewing gum, consisting of solidified seal oil and willow catkins – for there is nothing new under the sun!

The problem of the annual yield of the hunting is important but it cannot be answered satisfactorily. Where reliable statistics are available, i.e. in Greenland, the economic conditions have changed greatly after the introduction of more advanced fishing methods, sheep farming, etc., and from regions where the original way of life is still extant we have no details. A few facts may be pointed out, however. During his stay among the Netsilik Eskimos in 1923 Knud Rasmussen secured precise information of the number of seals caught during the winter, which is here the only season for sealing. It appeared that the maximum for a good hunter was rarely more than 20 or 30. This is the same as the conditions in the small settlements in



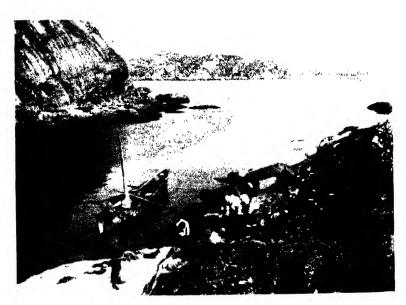
Fully equipped scal-hunters' kayaks from Angmagssalik Note the floats aft and the line-stands in front of the men



Kayaker from King Island Bering Strait using the single paddle characteristic of the western regions



The West Greenland kayak is so light that it is often carried on the head from one fjord to another



Umiak travellers stopping for lunch, West Greenland

West Greenland, where the way of living differs least from the original one. During the period 1930-5 the average number was 20 on the southern part of the coast and 23 farther north. On the other hand these numbers show a considerable decline since 1905-10, when the averages were 31 and 49 respectively. Caribou hunting is of paramount importance to the Netsilik Eskimos, but even in this case the yield is not striking. Knud Rasmussen found that although the best hunters might get 70 or 80 head annually, 20 or 30 were usual. In West Greenland caribou hunting has decreased rapidly during the last hundred years, and since 1927 the caribou are protected except in August and September. In 1933-7 the annual average was only 6 on the southern part of the coast and 2 on the northern part, while the corresponding numbers in 1915-26 were 11 and 3 respectively. Of course we must not forget that these particulars are far from giving a complete picture of Eskimo economics, since other game must be taken into consideration, and the fisheries especially are of great importance, but they suffice to show that life in the Arctic is hard.

CHAPTER V

The Struggle for Food

(continued)

STEFANSSON paints the Arctic as a land almost flowing with milk and honey and only awaiting a few brave settlers for it to step into the place in the world's economy that is its due. If we reduce this exaggeration by about a half, the truth remains that many people's ideas of the difficult life of the Eskimos have unconsciously been formed out of the thought of the privation which such a life would mean to themselves. The Eskimos notice nothing of this, and indeed any outsider in some degree adaptable to new conditions notices it very little. 'La vie, voyez-vous, ça n'est jamais si bon ni si mauvais qu'on croit,' says an old woman in one of Maupassant's novels.

There are, besides, great differences in mode of life among the Eskimos themselves. We have seen what a tremendous area they are scattered over. Their habitat ranges from regions possessing an Arctic climate as extreme as is known anywhere outside the desert of the inland ice, to localities in the south with offshoots extending into temperate zones. Nevertheless, as was pointed out at the beginning of last chapter, the same methods of securing a living recur more or less everywhere, always excepting the Central regions where some are lacking. But their relative importance varies greatly according to ecological conditions. The most obvious lines of demarcation are thus geographical, owing to the contrast between interior and coast, and between the various climatic conditions. Of secondary importance is the nature of the coast, which influences ice conditions and, through this, hunting.

Most widely distributed of the economies is the coast form, which is, of course, outstanding in Eskimo culture; but this again falls into a high Arctic, an Arctic and a sub-Arctic type.

The high Arctic culture is almost entirely concentrated upon ice hunting. If it is to thrive, the ice must lie practically

throughout the whole year so that hunting aquatic mammals in open water may be dispensed with if necessary. Only one tribe lives under these extreme conditions, the Polar Eskimos in the Thule District of most northerly Greenland. When they were discovered in 1818, the whole of the summer side of typical Eskimo occupations had disappeared: kayak and umiak were no longer used, and both caribou hunting and trout fishing, with the bow and leister respectively, had been abandoned. In no other part of the Eskimo world would this have been possible. Not until the beginning of the eighteen-sixties were these forgotten elements of their culture reintroduced through the immigration of some families from northern Baffin Island, and it is for this reason that these implements in the Thule District so closely resemble the Central Eskimo types.

It is no accident that the small tribe of Polar Eskimos has settled down on the east, and not on the west side of Smith Sound. Along the coast of Ellesmere Island the current carries along an inhospitable mass of drift ice; on the Greenland side, however, Inglefield Gulf and Wolstenholme Bay stretch out into large, smooth ice-fields in the lee of sheltering islets. The winter ice is the dominating factor in the occupations. In the two extremities of the district, about Cape York and at Îta (Etah), winter lasts almost the entire year, and it is therefore not surprising that the typical summer activities have here dwindled away and have been at last forgotten. It is in the two big bays that kayak hunting has been restored to honour and dignity.

Another important factor in the annual cycle is the period of winter darkness which forces a suspension of hunting for two months. Adequate stores of meat are therefore even more necessary here than in other parts of Greenland. Autumn, with its storms and unsafe ice, is no realiable time for obtaining meat; it is the spring hunting that has to fill the caches. This begins in May and June, when the seals crawl up on the ice; the Eskimos then move, in snow-house or tent, out on the ice to the hunting grounds, returning later to the site on the shore where they intend to spend the summer. In the region round Cape York seals are almost the only game; and these are too small to provide really large stores of meat, especially as here the Eskimos keep a number of dogs for the bear hunting in Melville Bay. For this reason food is not so plentiful as in Inglefield Bay,

where walrus, narwhal and white whale can be caught from the edge of the ice. *Nege*, i.e. meat, the name of one of the settlements there, is no idle one.

From the end of July to the end of September there is open water in Inglefield Gulf and Wolstenholme Bay, and nowadays this period is spent in kayak hunting. Formerly the Eskimo would camp near one of the big bird cliffs, and in this respect Inglefield Bay was not so satisfactory, as the little auk is not plentiful there. Although bird catching is of less importance today, the women must not neglect it, for it provides the material for the soft inner frocks.

When in September nights lengthen, when the winter ice begins to re-form, and the warm winter house calls, fox traps and hare snares are brought out. Hares provide indispensable skins for stockings and are easily taken in nooses set in their nocturnal feeding places. Trout are also speared at this season. But it is only when in October the ice is safe enough for long sledge journeys that hunting for large game starts again. The walrus is sought on the winter ice when it comes up to breathe, and, as long as the ice is bare of snow, 'smooth ice' hunting for seals is carried on.

With the arrival of the first snow it is necessary to turn to hunting at the breathing holes. The increasing darkness gradually makes all hunting difficult, and in December-January it ceases almost entirely. Then the Eskimos must fall back upon their meat caches, and fox hunting alone brings a little fresh meat into their diet. These months are a time of holiday, of comfortable home life and of journeys on family visits and feasts, which lasts until the breaking light makes breathing-hole hunting once more possible. At this time the Eskimos also start out on long bear-hunting trips through Melville Bay or up to the north of Humboldt Glacier; and in the past, before the Canadian Government put a ban on the hunting of the musk-ox, the mountains echoed with the howl of their dogs right over on Heiberg Land and southwards by Jones Sound. These long journeys have an economic background, for bear skin is necessary for clothing: but they are also a sport and a pleasure. Wife and children go along; the snowhouse is built in the evening wherever inclination prompts. It is these journeys that have trained the Polar Eskimos to be invaluable travelling companions, just as the severe conditions



A Copper Eskimo fishing tom-cod from the ice. If the fish caught are placed in a circle with their heads towards the hole in the ice, and the fisherman stands at the centre, he will always be in the middle of a shoal



Netsilik archers. In the sequestered regions round the Magnetic Pole bows and arrows were still in common use a few years ago



Netsilik woman with two husbands and child



Netsilik women walking in single file round a newly arrived sledge in order to enclose evil spirits in its company

have imparted to them an economic sense that is somewhat rare among the people of their race.

It is clear that the high Arctic type of Eskimo culture is a specialization with ice hunting as a focal point, a development which has been paid for by the loss of the hunting methods of the summer. If these are included we have the Arctic coast culture proper, which of all phases has the widest distribution and is actually the typical Eskimo culture. It requires in winter a lasting covering of ice that permits of sledge work and ice hunting, and in summer enough open water to make worthwhile the hunting of the seal and the whale from kayak and umiak respectively. The only real connexion this culture-form has with the land is the caribou hunting, which is especially pursued in the autumn months.

We will first sketch the life in Nordost Bay in the northern part of the west coast of Greenland. This widely ramified bay, which is almost coterminous with the district of Umánaq, is in many respects a southerly repetition of Inglefield Bay. One of the greatest differences between the two places is external to themselves. Nordost Bay lacks a Melville Bay on the south, an Inglefield Land on the north, an Ellesmere Island and a Sverdrup Archipelago to the west; in short it lacks the great 'commons' which afford the long hunting trips for bear or musk-ox. Only two or three bears are shot every year in the Ũmánaq district. Moreover, the more southerly situation makes itself felt in various ways. Winter darkness does not hinder hunting so much, and large stores of meat are therefore less necessary. The bladdernose and saddleback, which formerly were not found in Inglefield Bay (only in recent years has the saddleback appeared in Inglefield Bay owing to the amelioration of the climate), are here almost the principal quarry in summer, and there is open water so long that there can be no question of abandoning kayak hunting.

As elsewhere in the Arctic, spring is reckoned from the time when the ringed seals begin in huge numbers to bask in the sun, until the ice is no longer passable for dog sledges, which means that spring in this region includes the period from April to June. Then the most important hunting is for these seals and also narwhal and white whale at the edge of the open sea and in the large cracks in the ice. For the seal hunting some Eskimos move

into tents; but in the inner part of the bay there is now only very little movement and journeys extend scarcely more than some few miles from the settlement. In former days they were undoubtedly much wider in range.

The disappearance of the ice means not only a change of method but also of quarry; for the large seals, bladdernose and saddleback, arrive with the open water. During the whole of July and August these animals are caught from kayaks; there is also some fishing, guillemot catching and, in August, a little caribou hunting as a secondary occupation. It is only at the innermost settlements, where the large seals cannot penetrate, that the Greenlanders have to be content with ringed seals in summer too. Open water, with kayak hunting, continues in the late autumn months of September and October, with the difference that the large seals gradually decrease in number, but are replaced by the white whale and, later on, the narwhal.

With winter comes ice hunting. Kayak hunting is forced farther and farther west, out to the open sea, while the ice spreads out from the inner branches of the bay. In November nets can be set under the ice and, as long as there is no snow, smooth ice hunting is pursued, sometimes with very great profit. On the other hand, storms and unsafe ice may mean want. Net fishing, the principal occupation of this period to-day, is carried on throughout the winter, supplemented by breathing-hole hunting and halibut fishing and also – especially at the outer settlements – by hunting from the ice edge. Gradually as the ice becomes too thick to use the net, fishing assumes greater importance. Prior to the Danish colonization the net played only a subordinate rôle, and the other ice-hunting methods must then have been more prominent.

The life in Nordost Bay can be closely matched elsewhere in North Greenland, with the slight changes which local conditions, for instance the existence of current openings, must involve, especially on approaching sub-Arctic regions. A transitional type of this kind, influenced by current openings and drift ice, is to be found in the Angmagssalik District on the east coast of Greenland. If not actually an oasis in a desert of ice, this district offers the best conditions on the whole of that extraordinarily inhospitable stretch between Scoresby Sound and Lindenow Fjord. The coast here turns east to west for a short stretch, and one large fjord, and two small ones, cut north-

wards into the country. This gives the Eskimos their chance. The polar current flowing down the East Greenland coast carries with it the enormous mass of drift ice known as 'storis' or Polar Pack, and owing to oceanic conditions the ice both north and south of Angmagssalik lies like a great wall enclosing the coast; but at Angmagssalik the changed direction of the coast brings about a local dispersion of the ice floes and, with it, the possibility of catching large numbers of the animals, seals and bears, that live among the drifting masses.

On the indented coasts of southern Baffin Island and Labrador we find the Arctic culture phase again, without much change, except that there, much more than in Greenland, the natives are, or in Labrador were, dependent upon caribou hunting; for owing to the extension of the rigorous game preservation laws to the coast of Labrador the Eskimos there have been cut off from what is practically their only means of livelihood in the difficult spring period when the ice is breaking up.

If we proceed westwards to the Mackenzie delta and northern Alaska we find, however, the Arctic coast culture in another form. Instead of the indented mountain coasts of the easterly districts, falling steeply down to a deep sea, the eye encounters low tundras along a shallow sea. The dividing line between land and water is blurred by shoals and spits which often enclose large shore lakes. Long peninsulas run out to sea, and among these is Point Barrow, the most northerly tip of Alaska, whose population is typical of the whole of this region. No neighbouring islands shelter this open beach from the drifting pack ice of the polar basin when in winter it is pressed in towards the land. The ice is, however, arrested by shoals, and there crowds together and towers up in an almost impassable belt many miles wide. Only here and there are flats of smooth winter ice found on the shore side of this packed-up chaos, and it is comprehensible that breathing-hole hunting is of small importance under these conditions. Here it is net hunting in the tidal lanes that predominates in winter.

And yet things would often look bad for the Eskimos of Point Barrow if they had to fight through this season by means of ice hunting alone, for the autumn gales often force the pack ice over the shoals so that the flat winter ice disappears, and bring seal hunting to an end. There is, however, another environmental factor more favourable to the economy of the people than the low coast and which plays an important part. This is the occurrence of the right whale.

These huge whales are also hunted - or rather were hunted, for now they are almost exterminated - in the Easterly regions, Greenland, Baffin Island and Labrador; but in none of these regions was their importance commensurable with what it originally was in northern Alaska. When in April the open water appears along the coast the migrating whales arrive at Point Barrow; at midsummer they disappear, moving east to the mouth of the Mackenzie and the western boundary of the Arctic Archipelago; they return, however, after August. At these times the men stay out day and night at the edge of the ice with their big skin boats. It is not the owner of the boat who harpoons the whale, for this is not considered equal to the art of steering the umiak and calculating where the whale will rise. On the other hand, the harpooner might claim a visit from the boat-owner's prettiest wife the night before going out to the ice edge; for the whale is susceptible to the charms of the female sex and prefers to be killed by a man who comes straight from a woman.

In earlier days whaling gave the Eskimos that reserve of meat and blubber without which the winter would prove hard. Up to twenty of these giants would be killed in a single season, and it was the rapid decrease in the numbers of right whales, when white whalers began their systematic butchery, which forced the government of the United States to introduce the reindeer into these regions, which had thus become almost bare of means of subsistence.

In almost complete contrast to the high Arctic culture is the sub-Arctic type, which has specialized in the hunting of aquatic mammals in open water, and which therefore belongs to regions where the winter is too mild and too stormy for winter ice to form along the coast. Just as specialization in the high Arctic culture was to the detriment of kayak and umiak, so the one-sidedness of the sub-Arctic culture has affected the dog sledge, which is here often unsuitable and even superfluous for the important activities.

Here again Greenland affords an illustration. If the northern end of Greenland, the world's biggest island, lay in Edinburgh, Cape Farewell would be found to be down in Morocco. It is comprehensible therefore that the island can contain all three climatically conditioned forms of Eskimo life. It was Greenland's sub-Arctic culture that first became generally known in Europe through the classic writers of the eighteenth century such as the Egedes, Glahn, Fabricius, Cranz and others, and it is this in consequence, and not entirely justly, that has often been popularly regarded as the norm of Eskimo life.

The transition from the Arctic culture is quite gradual; but the boundary may be placed at about the Arctic Circle, south of which the dog sledge is not used on the west coast. When we come to the Sukkertoppen District, midway between the Arctic Circle and Godthaab Fjord, the sub-Arctic mode of living is fully developed. It is true that winter ice forms in the fjords every year; but as the sledge is no longer used, the ice is rather an inconvenience, and the settlements are therefore gathered along the sounds of the outer coast. Here, too, thin ice may occasionally hamper hunting, but only for short periods at a time. There is very little drift ice. Only very occasionally does the storis get so far north in summer and, even though the socalled West Ice from Baffin Bay appears somewhat more frequently, it too is exceptional. Open water most of the year round is therefore the principal feature of the environment of this district, and consequently the saddleback, and not the ringed seal, is the most important object of the hunter. There are also considerable numbers of birds and halibut, cod, wolffish and trout, and commercial fishery has now been started in many places. Only of late years, however, with the decline in seal hunting, has fishing found favour in the eyes of the population, and only a generation ago the well-to-do hunters who own umiaks preferred to travel up the fjords to hunt the caribou in the fishing season.

In spring there is some hunting for ringed seal that have crept upon the ice. Otherwise, hunting is influenced by the fact that the saddleback leaves the coast in March, or at the latest in April, while the bladdernose at the same time begins to appear. April is an important month for the hunting of this latter species. In May, when the saddleback begins to reappear in small numbers, the population leave their winter houses. Summer begins in June as everywhere in South Greenland with the fishing of capelans (Mallotus villosus), locally known as angmagssat, small, rich salmonide fish resembling slender herrings, which come in to the coast of South Greenland and also

of Labrador to spawn. They are literally scooped up in thousands to be dried for the winter store. The shoals and the saddleback leave the coast together, and it is then customary to go up the fjords in umiaks to spend the late summer hunting caribou and fishing for trout.

At the beginning of September these Greenlanders return from their summer journeys and at the same time the saddleback comes back to remain on the coast until March the following year. In the autumn months it is hunted from the kayak, shot from the shore in the sounds, or taken with the net. In reality there is no special winter hunting in this district. The autumn kayak hunting is continued throughout the winter, though often hampered by storms and thin ice. But it is note-worthy that certain reminiscences of Arctic life appear wherever there is a possibility. The great quantity of drift ice that every summer closes Julianehaab Bay stimulates hunting from the ice edge to an extent that is unknown elsewhere, and a genuine Arctic method like breathing-hole hunting also occurs in South Greenland. Both in the widely ramified Godthaab Fjord complex and in certain parts of the Julianehaab District there are some settlements that are far from the outer coast under conditions that indicate a formerly more extensive fjord habitation of a kind similar to that farther north. Furthermore, Mathiassen's excavations in the Sukkertoppen District have shown that the dog sledge was used there as late as the end of the seventeenth century, and one or two archaeological finds indicate that the dog sledge may even have been known in the Cape Farewell region. Taking everything into consideration, it is obvious that the sub-Arctic type, like the high Arctic, is a later offshoot of the Arctic culture proper.

Although the territory of the Labrador Eskimos extends much farther south than that of the Greenlanders, the search for a genuine sub-Arctic mode of living is here a vain one. There are approaches to it, but nothing more, for, despite its situation, the climate of this region is much more severe than at Cape Farewell. It is only in the far-distant region of the Pacific Eskimos and Aleuts that we find a life which is, in its way, as sub-Arctic as that of the South Greenlanders. Here on the mainland the Athapaskan Indians shut them out from the inland mountain districts where caribou, moose and mountain goat are found, and the people have therefore been compelled to de-

pend mostly upon the sea. This is, however, rich in resources. and the waters round the Aleutian Islands are still richer. Hence came the winter wren which flew into the rigging of the steamer going to Japan and told Kipling the story of the white seal and the swarming rookeries of the sea-lions and fur-seals. Here in former days could be heard the blowing of all the giants of the deep: the right whale, humpback whale, sperm whale, Californian grey whale, and so on. Walrus, on the other hand, occur only sporadically, while the sea-otter, whose skin nowadays represents a small fortune, is almost exterminated. The ice never comes to stay. All the year round a storm-whipped and foggy sea beats against these rocky coasts, and kayak-paddling has attained such a degree of skill that, as an old Russian writer puts it, it is impossible to decide whether the kayak was created for the Aleut or the Aleut for the kayak. Whaling from the umiak and the two-seated kayak is also pursued successfully, but the harpoon has here in most cases been replaced by the slateheaded lance.

Until recently our knowledge of the ethnology of the Pacific Eskimos was more or less limited to the casual observations of Captain Cook and the early Russian explorers, but on the Dano-American Alaska Expedition 1933 we succeeded in obtaining a fuller account of the Chugach group in Prince William Sound. To-day there is only a single Eskimo village left in this region, and to a great extent the native population earns its living by working at the canneries. Nevertheless, the white influence is still superficial in many respects, though remarkably more so in spiritual than in material culture. As in South Greenland the annual cycle of occupation is less pronounced than in the Arctic. Whales, for instance, may occur most of the year, and the same is true of the sea-otter, which is now strictly protected, and the spotted seal, which is often killed with a club on the rocks, a stuffed seal being used as a decoy. The principal hunt of furseal takes place in spring, and summer is essentially a fishing season; both halibut and cod are caught in early summer, but the great event is the big salmon run, which continues, with five different species all belonging to the genus Oncorrhyncus, from the beginning of May till the middle of September. In August and September mountain goat is hunted, and soon after comes the best time for sea-lions, which are not pursued at all during the summer, because at that season they smell too strong.

Between the islands in the eastern part of Prince William Sound the deposits from the Copper River form extensive flats which are more or less dry at low water. Here there is an abundance of invertebrates – clams and blue mussels, snails, worms, etc. – which afford a never-failing food supply if hunting fails, and the large prehistoric shellheaps in these regions give ample evidence of the extent to which they have been utilized. As a consequence the population here seldom suffered from the catastrophic famine periods as did the Arctic tribes. In this respect Prince William Sound forms a transition between the Eskimo area proper and the North-west Coast.

Altogether the life of the Pacific Eskimos differs remarkably from that of their kin, but on the other hand there are also many similar traits. Attention has been drawn to various elements in their culture suggesting an immigration from the north, at any rate into the mainland areas along the Pacific. The use made of skin boats, of bows with a backing of sinew cord, and also the marked preference for drift-wood in the middle of a timbered country, would all seem to show that the Pacific Eskimos originated in the north.

We have now dealt with three different, climatic types of the culture, all of which are pronounced coastal forms. No inland type corresponds to either the sub-Arctic or the high Arctic phase; but it is otherwise with the Arctic form proper. Even among the Coast Eskimos in the North-west Passage life has a distinct continental character and we find here a transition between the coast and the inland type. To these people the sea is only of importance for the winter ice hunting; open-water hunting does not exist, for in summer they turn their backs upon the sea and go caribou hunting in the interior.

In three different places within the Eskimo region we do find genuine inland tribes. These are in the flat delta of the Yukon and Kuskokwim, where fish abound, in the mountains and on the great coastal plains about the Kobuk, Noatak and Colville Rivers in northern Alaska, and, lastly, on the Barren Grounds west of Hudson Bay.

On the Barren Grounds the physical conditions may be characterized briefly as follows: a low country where softly rounded ice-eroded hills rise above wide plains, and where the caribou still roam in immense herds; everywhere there is a super-abundance of water, bog, small ponds and lakes of all sizes full of fish, with outlets through several large rivers; and finally, along Hudson Bay there lies a sandy, inhospitable coast, so monotonous that its horizon-line might almost have been drawn with a ruler and so low that, at ebb tide, boulder reefs can be seen jutting out above the surface of the water at a distance of several miles from the shore. The response to these conditions is unique in Eskimo territory; there is not a single winter settlement by the coast. The vast lakes in the interior and the river courses running from west to east, where the caribou have their crossing places during the great treks in spring and autumn, are the foci of the population, and only about a third of it spends two months every summer down by the sea for seal and walrus hunting. To most of these Eskimos the salt water is and always will be something strange.

When on the Fifth Thule Expedition we became aware of the peculiarity of these tribes, we did not doubt that the most fitting name for them would be the Caribou Eskimos. The Mountain Lapp is no more dependent upon his reindeer herd than these Eskimos are on the caribou. In autumn the whole foundation of the following year's economy is laid by the important hunts which take place when the caribou herds, during their migration southwards, cross the rivers. During the autumn trout run, fishing is also pursued, and in this manner a store of food is collected sufficient for a great part of the winter, while at the same time skins are procured for new winter clothing.

The old conception that all the caribou desert the tundra in winter to seek the shelter of the forest is quite wrong. There are always some which remain, and these are hunted by means of pitfalls, although their numbers are not sufficient to provide a sole means of support for the population. Musk-ox hunting has now ceased, but fox trapping has now become important. The occupation subject to fewest changes perhaps is fishing, which is first practised with the leister, later with the hook. Certain statements by the old English traveller Hearne indicate that this people were also aware of that remarkable method of fishing with the harpoon from snow-huts on the lake ice; nowadays, however, one must go as far as the Back River to find it.

The Caribou Eskimos are skilful hunters, but very improvident, and when towards the end of winter the autumn supplies

have been consumed, there usually occurs a period of want until the caribou begin to arrive from the south. Nearly every winter one or two families succumb to hunger, and under such circumstances cannibalism might formerly take place. It would be unjust, however, to put all the blame upon their inability to refrain from eating up their stores. The periods of want seem to have become worse during the last generations, and there is no doubt that no small responsibility for this rests upon the introduction of modern rifles both among the Eskimos and among the Indians; but it is doubtless just as much due to the forced fox trapping, which makes the Eskimos entirely dependent upon the trading post. The man who dies of hunger surrounded by fox skins to a value of five hundred dollars is by no means unknown. At the end of April 1922 at Baker Lake we heard of great privation in the south, and at the same time a sledge party arrived from the west that had had nothing to eat for four days. Later on we learned from my 'adoptive father' by the big lake Hikoligjuaq that he and his family had only saved their lives by his eldest wife and a boy taking a hand sledge to a distant lake for fishing.

Ptarmigan help to eke out a meagre subsistence until the caribou migration begins in spring, and only with the arrival of the herds is the turning point reached. At the crossing place Nahiktartorvik on the lower Kazan River there is a small rocky knoll which gives the place its name: 'the lookout'. It is from there that the first glimpse can be obtained of the caribou herds making their way northwards, and, when the time is approaching, hunters often set out in sledges from the adjacent camps in order that they too may be ready to participate in the joyful event. We happened to be at one of these settlements when the sledges returned and the cries of 'the caribou are coming' were already ringing among the snow shelters as they first came in sight.

Caribou always move in herds; first come the cows with young, then cows with year-old calves, and lastly, well into the summer, the old bulls. Thus there are always fresh herds for the Eskimos to resort to. It may be this very knowledge that makes them let each day be sufficient unto itself; but their improvidence is sometimes punished, and there may be want even in midsummer. At this time of the year there are a number of families living near the coast who move down to the sea with

their sledges, taking advantage of the last snow in May. There they hunt basking seals and, from the ice edge, seals and walruses. The return to the interior has to be made as early as the beginning of August, however, in order to take advantage of the autumn migration of the caribou, so that this annual visit to the coast does not last much more than two months and only a very small proportion take part in it.

How is this remarkable life, differing so much from that of all other Eskimos, to be regarded? Did these Caribou Eskimos originally live on the coast in the usual manner and from there wander inland? Nothing is more improbable. The Caribou Eskimos in the interior never in any circumstances use the blubber lamp. For illumination they burn a lump of caribou fat with a moss wick on a naturally hollowed stone, or, at the best, a small, shallow bowl. All food must be cooked and all snow melted over fires of heather and brushwood laboriously gathered from beneath the snow. As a fire cannot be lighted inside the snow-hut, it means that these people regularly spend their winters, when the temperature for at least three months is no less than -30° F., and often under -60° F., in houses which are without means of heating whatever. It is difficult to imagine that a people having once lived on the coast and there known the blubber lamp should settle inland and make no provision for the bartering of blubber at least from the coast dwellers, as the inland population in Alaska has done.

Thus a migration from the coast to the interior is difficult to believe in. On the other hand, there is distinct evidence of a movement in the opposite direction. The Caribou Eskimos who annually migrate to the sea are apparently inland people who have only recently adopted this habit. They themselves have traditions that suggest this. Furthermore, there are, at the coast, house-ruins of an Eskimo population which may definitely be said not to have been the forefathers of the present population. In the culture of the latter there is an abundance of features all of which point towards a former existence in the interior. For instance, at the coast they still continue to cover their kayaks with deer skin, though seal skin is both stronger and more waterproof. Aquatic mammals are hunted, but most of their meat goes to feed the dogs; they themselves refuse to eat it, so long as there is caribou meat to be had. But evidence of greater importance is that of these temporary coast dwellers only a very few use the blubber lamp. They, too, spend the winter in unheated snow-houses, and, in the middle of the seal-hunting season, when the whole camp was flowing with blubber, I have seen women of the coast wandering miles inland to gather brushwood for fuel!

So far very little is known of the life of the Eskimos on the lower Yukon and Kuskokwim, whereas thanks to Giddings, Ingstad and Helge Larsen we are now in possession of more ample information about the inland tribes of northern Alaska. In many respects their life is similar to that of the Caribou Eskimos. Thus, caribou is by far the most important game, although mountain sheep are also hunted, as were musk-oxen until they were exterminated, probably some time in the nine-teenth-century. Also, fishing with hooks and net traps under the ice is eagerly pursued in the winter.

On the other hand there are certain differences from the Caribou Eskimo pattern. The principal hunting method is by means of circular enclosures with three or four rows of snares. As on the Barren Grounds tallow is used in the lamps for lighting, but cooking is done with hot stones in bark vessels. Birch and spruce bark are very important raw materials. The dwellings belong to a characteristic and primitive type of earth lodge to which we shall revert in the next chapter. The westerly bands spend the spring at the coast of Kotzebue Sound hunting seal and walrus, in other words in a way similar to that of the afore-mentioned smaller proportion of the Caribou Eskimos. Yet the most conspicuous difference between the inland tribes of the Barren Grounds and Alaska is their relations to the coast, for whereas there are now no permanent settlements on the south-western shores of Hudson Bay, many villages with a large population of sea-mammal hunters are found on the coasts of Alaska. Therefore the inland tribes are able to carry out an extensive trade with the coast dwellers, and that does not apply solely to those who take an active part in sea-mammal hunting themselves but also to the eastern bands, who never hunt on the sea, but nevertheless undertake regular journeys to the Arctic coast every spring in order to buy seal oil, baleen for fishing lines, walrus ivory, etc., which they pay for with caribou and wolverine skins, snowshoes, and other inland products.

The special type of culture among the Inland Eskimos cannot be regarded in the same manner as others, namely as the result of a geographical adaptation of general Eskimo culture to local natural conditions. That purely culture-historic causes do on the other hand come into play cannot be doubted. Thus the Inland Eskimos occupy a special position to which we will revert at a later opportunity.

CHAPTER VI

Fighting the Cold

The life of the Eskimos is not merely a struggle against hunger alone but also an unending fight against the cold. To no people is warm and complete clothing more necessary than to those who, unlike the tribes of the northern forests, seldom have a wood-fire to warm them.

If we glance at the many different types of clothing in various parts of the world, we find some that originated as a protection against the cold, others in which adornment is the principal consideration, and lastly, and fewest, those that appear to be due to modesty alone. Modesty is a quality the development of which is dependent upon the presence rather than the absence of clothing.

In the dress of the Eskimos the modesty factor is of subordinate importance, as is shown by the fact that the Greenlanders, like their kinsmen in Alaska and on the Alcutians, formerly went almost entirely naked in the stiflingly warm winter houses. Their attitude towards sexual modesty differs from ours in its freedom from all narrow-minded hypocrisy, but it includes a certain fear of magic. Sexual relations are regarded as something entirely natural, indeed so natural that it is not to be denied that one gets something of a shock the first time one witnesses the candour with which it is talked about, even in the presence of young children. But if we turn to the physical side of sexual intercourse a new factor appears: one may be otherwise naked; but the sexual organs themselves, the seat of the mystic power of propagation, are considered to be in a sense taboo and must therefore be kept concealed. This custom is apparently related to the belief that they are particularly exposed to magical influences. In East Greenland and Labrador a primitive garment was formerly used for this purpose, a diminutive, triangular apron, tied round the waist and between the legs with a cord. Among the Pacific Eskimos both sexes had a rectangular apron, often beautifully decorated with shell beads,

but no corresponding garment was known to the intermediate tribes.

Air is a poor conductor of heat and when it is possible to create an isolating layer of air it is not difficult to keep warm. This is the point of double windows, and the clothing of the Eskimos is made on the double-window principle, i.e. it consists of an inner and a separate outer layer. In warm weather the underclothing alone is worn. In the skins of the Arctic animals they have an invaluable material for clothing. On the whole, so many skins are available that they can afford to be particular in their choice. Seal skin is strong and to a certain degree waterproof; but in very cold weather it is not warm enough. Bear skin is exceedingly warm, and one can fall into the water wearing a pair of tied bear-skin trousers without getting wet; but they are tremendously heavy. Musk-ox skin has the same disadvantage, and it is also almost impossible to keep the shaggy fur clean of blood and dirt. Hare, eider-duck and fox skins combine great warmth with extreme lightness; but they are all too delicate for general use. Caribou skin is without comparison the best material for clothing in severe cold. It is comparatively strong and also very light and warm, because there is an air-filled cavity in every hair. It is true that in consequence the hairs break off very easily, and in a snow-house inhabited by a family of deer-skin-clad Eskimos there is a constant rain of hair which sticks to the greasy implements and floats in the soup pot and the water pail. But when faced with the alternative of being either cold or finding a few hairs in one's food, the choice is not difficult.

The Eskimo dress is the ideal Arctic clothing, because it fits so loosely that there is a layer of warmed air between it and the body, while at the same time it permits the free evaporation of perspiration. In this clothing one can become saturated with sweat, and five minutes later be dry again without any feeling of discomfort. To derive the full benefit of the skin dress, however, it is essential that it be quite dry, and if anyone believes that the defective sense of cleanliness of the Eskimos regarding their person extends to indifference about their clothing, he has only to see how painstakingly every flake of snow and every trace of rime is beaten out of the frock before it is taken into the house. In most places there is even a special 'snow beater' for this purpose, a flat, sword-shaped wooden stick. Mittens and

stockings are laid for the night to dry on a shelf of laths or on cords stretched above the lamp.

The Eskimos in fact take great care of their clothing. 'A man is the hunter his wife makes him,' say the Polar Eskimos, for they know how far a well-made dress will make a hunter independent of the weather and so more certain of his prey. Eskimo clothing is decorated in many ways and the effect is attractive. If the reader should have an opportunity of visiting a museum with a large Eskimo collection - and in this respect the Danish National Museum is first in Europe and, as regards certain groups, in the whole world - he will be able to observe how much has been achieved with small means, how skins of various shades are beautifully matched, and how gay an effect can be attained in the frocks of the Central Eskimos, for instance, with their white insertions and fringes on the chestnut brown background of the velvety summer skin of the caribou. Aleut cmbroidery carried out with the silvery hair of the whiskers of the old bulls is extremely beautiful, and is the highest development of a technique of which there remain only faint traces in Greenland and in the Central regions, although originally it was not unknown in both these places. One of the main reasons for its disappearance in Greenland is presumably the popularity of the skin mosaic work which the introduction of European dyes brought about. Originally, red seems to have been the only colour used, the skin being boiled with the bark of drift-wood. In a similar manner the Copper Eskimos to this day use only red ochre for their primitive skin mosaic. Nowadays the West Greenlanders have numerous dyes; the skin is cut into narrow strips and squares with a small knife, and these are sewn on one by one to the foundation with the greatest accuracy to form variegated patterns which are made up by the seamstress as she goes along, usually with the most perfect taste.

The decoration of the clothing emphasizes the edges and the seams; when, exceptionally, there is additional ornament, one may assume that it has a special history. For instance, the band which runs across the back of some of the Caribou Eskimo men's frocks, originated in the amulets which are worn in the same way. Consequently, decoration remains within the bounds of good taste. The Eskimos know nothing of the fantastic manifestations of extravagant vanity that make certain negro women drag about some forty pounds weight in iron ornaments. Real



Netsilik I skimos fishing trout with fish spears behind a stone weir in the river



West Greenland woman cutting up a seal. The children are enjoying small pieces of raw blubber and liver



Seal hunter with wooden snow goggles. He belongs to a small band of Caribou Eskimos who visit the sea for a short time every spring



West Greenland seal hunter wearing the waterproof kayak jacket which is tied round the rim of the kayak opening and round his face and wrists primitive taste is never bad. Among the Eskimos, barbarisms only begin far to the west, where the people have been influenced by foreign cultures.

In the cut of the frock, we find a considerable difference between the Pacific Eskimos and the Aleut on the one hand and all the other tribes on the other. Among the former, the frock is almost always made of the skin of small creatures, either sea birds or ground squirrels, which they first make into horizontal bands and then join together to form a long, ankle-length smock (Russian parka). A kind of yoke covers the shoulders, and the neck opening is edged with a stiff upright collar of seal skin or a thick edging of fur. There is no hood on these frocks. The head is here covered with a skin cap or a conical hat of spruce roots or thin wood, which is magnificently painted in red and green and adorned with carved figures of ivory and the long whiskers of the sea-lion. Both colours and designs seem to have had the magical power of attracting the sea mammals to the wearer.

The most characteristic feature of both men's and women's frocks throughout all the rest of Eskimo territory is that they are furnished with a hood, and that back and front are each formed of a separate skin, the frock thus being seamed up the sides. It is of interest in this connexion that we are able to trace the development of this peculiar type of dress. Its history, like that of the garments to be discussed later, has been described by Professor Gudmund Hatt. Among several Indian tribes in Western America as well as among some of the Arctic people of the Old World (Voguls, Zyryans and Lapps) a very simple garment, best known by the South American term 'poncho', is worn. This is merely a loosely hanging skin with an opening for the head. The size of such a poncho is naturally restricted by the size of the skin and it is of advantage therefore to make it of two skins sewn together over the shoulders, leaving an opening for the head. If this two-skin poncho is also sewn up the sides and furnished with sleeves, we have a skin shirt similar to that worn by many Indians, and if, finally, it is fitted with a hood, the fundamental cut of the Eskimo frock is complete.

The frocks of every district naturally have their peculiarities. Along Hudson Bay the man's frock reaches almost to the knees, and the hem is slit up at the sides, whereas on the North-west Passage it is not unlike a modern tail-coat. In the Central

regions, where it is also as a rule fringed, we have an opportunity of observing that absurd fashions are not restricted to ourselves alone. A Copper Eskimo frock of the proper cut is too short both at the wrists and across the stomach, and the hood does not cover much more than the back of the head. Both in the eastern part of the Eskimo area and in northern Alaska the man's frock is short and has a fur border instead of fringing.

The outstanding feature of the women's frock is that its lower edge extends back and front in a long tongue or flap, and among the Central Eskimos the one at the back widens into a broad skirt which reaches right down to the heels. In northern Alaska the cut is complicated by a short skirt sewn on at the bottom. The enormously wide hood and the sac back, in which infant children spend the first year or so of their lives, is in most places a conspicuous feature. There they sit warm and comfortable against their mother's naked back, at first wearing only a little cap, later a vest of velvety fawn skin. When hunger begins to call, there is plenty of room under the wide frock for them to be taken round to the breast without having to be brought outside. But when Nature makes herself felt in another manner, the mother may be seen extracting her naked offspring with a lightning-like movement, even though the thermometer records thirty degrees Fahrenheit below zero. No wonder the race is a hardy one!

On the north-western shores of Hudson Bay inner frocks are sometimes seen that are embroidered with beads in such profusion that they are valued up to about sixty dollars. Many patterns have obviously been borrowed from the Indians, who had beads before the Eskimos knew of them and whose style of ornament was based upon simple, geometrical figures including a kind of double curve. Among the Indians these elements have now to a great extent been replaced by semi-European flower decorations, whereas they have been preserved with fewer alterations among the Eskimos.

More subdued in effect, but much more costly, are the frocks of blue fox which are worn by the women and, indeed, sometimes by the men in the Thule District of Greenland. Many a white woman of fashion has no more costly dress than that of a little Polar Eskimo girl. With these they wear inner frocks of bird skin. In West Greenland the eider-skin inner frock is nowadays furnished with a high, stiff collar and is covered by a gay

jumper of cotton or even silk, over which a large bead shoulder collar falls loosely. In Greenland it is a fine sight to see a party of young girls in the hills. Their richly coloured dresses shine as brilliantly as flowers in the dark heather, and their wearers move over the rough ground with the easy assurance that practice from infancy, the soft-soled, serviceable boots and the lack of hampering skirts unite in giving.

The Aleut and the Pacific Eskimos seldom wore trousers, which were to some extent made superfluous by the long frocks. Elsewhere they are used by both men and women, and, to judge by their cut, seem to have been developed by sewing together a pair of long leggings like those that are still worn by many Indian tribes. True leggings are also known as a part of the female dress in Baffin Island. In Greenland the women's trousers are quite short, extending down only to the longlegged boots, while at the top they do not even reach up over the loins. To see for the first time a Greenland woman bending down is to be seized at once with the fear of impending catastrophe! On the east coast the trousers and the upper edge of the boot do not meet, and only during severe cold is this bare leg bound with a piece of skin; certainly an airy and not especially suitable fashion in this climate! While trousers are made of blue fox skin in the Thule District, farther south they are of deer or seal skin and very prettily ornamented with skin mosaic work.

The footwear consists of fur stockings and boots, which for summer use are often of depilated seal skin, and, particularly in the Central regions, special pull-over boots are also worn. In contrast to the soft moccasins of the northern Indians, the boots of the Eskimos have a separate sole, which doubtless represents what was originally a sandal. The boot has apparently developed out of a combination of sandal and skin stocking, and loose sandals are still worn in some cases by Eskimos, for instance in smooth-ice hunting. Most peculiar are the long, rather narrow Greenland boots, especially those of the Polar Eskimo women, not to speak of the woman's boot west of Hudson Bay, to the upper edge of which is sewn a legging with a rather useless and ugly bagging on the outer side of the leg. The gait of the Central Eskimo women is not a graceful one to begin with; they waddle and almost always walk with their toes turned in. But when their legs are clad in these fantastic envelopes, and the long frock-flap dangles at their heels at every

step, one thinks regretfully of Greenland. The Aleuts and the Eskimos in southern Alaska often go barefoot, but they too have footwear that must be regarded as special forms of the common Eskimo type; the men's boots in particular are enormous and give the leg a completely elephantine appearance.

Mittens are, of course, worn everywhere, but gloves seem to have been introduced only in recent times.

It may sound strange, but it is in those places in the Eskimo region where the climate is mildest that the greatest variety of garments is needed. There are two reasons for this: first, because the hunting of aquatic mammals in open water, which makes very definite demand for waterproof clothing, is only found in the marginal regions; and second, the purely geographical factor that in the coldest regions the people are already so warmly clad that there is no need for special clothing for ice hunting as in Greenland.

Outside the Central regions a frock or shirt of strips of gut skin is used for keeping out rain and spray when hunting in open water. In southern Alaska and on the Aleutians this kamleika1 is sometimes as long as the frock and, like it, is made of horizontal strips. Farther north and in the eastern part of the region, however, it is short and the strips run vertically. There is also the so-called 'half frock', a sort of short skirt or broad belt of unhaired seal skin, the top of which is tied under the arms and the bottom round the manhole of the kayak. Clad in gutskin shirt and half frock the kayaker need have no fear, despite the waves, that water will make its way into the boat. In Greenland the gut-skin frock has become a more special rainy weather dress, while for kayak use there is a special coat of unhaired seal skin, the 'whole frock'. In former days the Greenlanders when out whaling wore a special combination suit of which an old specimen, probably the only one in existence, is in the Danish National Museum. This dress of waterproof skin consisted of frock, mittens, trousers and boots all in one piece, and laced at the breast. The air inside was sufficient to keep the wearer afloat in the water. Dresses of this style seem to be a survival of an old form; they are used among most Eskimos for children

¹ This word is a corruption of the Eskimo term kamlîkaq, which means a fur coat, but it has been adopted into the Anglo-Russian language of Alaska with the signification of gut-skin frock. The Eskimo name of the latter is in southern Alaska kanaggluk.



An Iglulik boy ready to play when the thermometer shows 50 below zero



Caribou Eskimo woman returning to the camp with a load of fuel. These Eskimos never use blubber lamps, but cook over open fires and spend the winters in unheated snow-huts.



Man's winter dress of the Iglulik Eskimos made entirely of soft caribou skins and probably the warmest clothing in the world

> National Museum, Copenhagen

Combination suit of waterproof seal skin formerly worn by West Greenland whalers. The man enters through the hole in the middle and draws it tight with the thongs

> National Museum, Copenhagen



and also as underclothing for women among the Asiatic group and the Chukchi and Koryak.

For breathing-hole hunting complete dresses of bear skin are sometimes used in East Greenland. They are warm, and their great weight is not of importance in this case, because the hunter stands or sits motionless on the ice.

There still remains one form of protection to be mentioned; this is equally necessary everywhere, though only in spring. Coming out into the open air at this time of the year is like getting a blow in the eyes, so violent is the effect of the piercing light reflected from the snow-fields. If great care is not taken, the consequence is the extremely painful snow-blindness, and snow goggles are therefore indispensable. As a rule they are made of wood with a narrow slit for the eyes. Another type are the eye shades, which in Alaska, the Hudson Strait region and Greenland are used in kayak hunting. These may be decorated with carved figures in ivory, and are often miniature works of art.

Several years ago a Danish housewife in Greenland was astonished at the native girl she had just taken into her service complaining of the uncleanliness of the Danes – 'because', she said, 'when you eat, you each use at least two plates; in my father's house we all cat from the same dish'. The fact is that even the Eskimos' best friends cannot hide the fact that cleanliness is not one of their great qualities. It is bad enough in many parts of Greenland, though European standards are quite often reached in some places there; but where the Eskimos live in their primitive state there exists a piggishness about person, utensils and food that exceeds all bounds.

It is, of course, easy enough to demonstrate one's own superiority; but parents have only to consider their own offspring to see that cleanliness is no inborn characteristic, but an element of culture that has to be learned gradually. In this direction the Arctic does not offer much encouragement. Every single drop of water in winter has, as a rule, to be obtained by melting snow or ice, and this demands blubber, which can only be procured by long and strenuous hunting; even on the warmest day in summer the sea is in most places too cold for bathing. Nevertheless, the degree of cleanliness does vary remarkably even among neighbouring tribes. The Utkuhigjalingmiut on the Back River are undoubtedly the cleanest and most fastidious Eskimos I have ever seen outside the more civilized regions.

whereas their close kinsmen, the Netsilingmiut, come in an easy first on the opposite side.

It must indeed be admitted of the Eskimos that they are not overfond of washing. The Alaskan Eskimos have adopted a variety of the Indian and Siberian sweat bath, not a very nice affair, as the method is simply this: that they rub themselves with a mixture of snow and stale urine in specially heated houses. Actually this liquid has excellent fat-dissolving properties and thus opens the pores so that the perspiration can flow freely. Still the use of the sweat bath has the effect that cleanliness is on a much higher level in Alaska than, for instance, in the Central regions. In Greenland, too, it was formerly the practice to wash the hair, at any rate, in urine; it was the thing to 'smell like a young maiden'. It is, however, ethnographically, instructive to observe that even so apparently insignificant a feature as washing in urine, which one might expect to find anywhere or everywhere, is nevertheless a special 'invention' which belongs to very definite culture surroundings. This appears from its peculiar distribution in North America. In previous pages several instances have already been given of various Eskimo culture elements occurring only in the two marginal regions. Urine washing is also found again among the Nootka Indians as far south as Vancouver Island, where there are furthermore a number of other features such as whaling, reminiscent of the Eskimos.

It is not surprising that the most numerous insects in the land of the Eskimos, always excepting mosquitoes, are vermin. Their number was one of the reasons that many Eskimos were from the very first so fond of European shirts: it became so much easier to find the small parasites. Nor is the discreet back-scratcher solely a European creation of the period of wigs and tower-like hair dressing, as many perhaps think. This instrument is known to all Eskimo tribes and, what is more, with a special refinement, namely a tuft of bear hair which serves as a lice trap when the scratcher is inserted under the clothing. The spoils of the chase are not wasted, for – as the Greenlanders

¹ Both head and body lice are extremely common, whereas *Phthirius pubis* scarcely occurs. It may be added that there are no fleas among the Central tribes, whose snow-houses and tents do not provide any place for the eggs to hatch. In Greenland there are fleas in only one or two places, to which they have evidently been brought from Europe. What the position is in Alaska I do not know.

expressed it in bygone times - 'they bite, and therefore must be bitten'.

Hair combs of various types are used. The men wear their hair loose or trimmed round like a calotte, and in the regions west of Hudson Bay cut off close on the top of the head like a kind of tonsure. In Greenland the women roll their hair into a top-knot, and tie it with a strip of seal skin, but in most other places it is gathered into two coiled plaits over the ears or worn in two plaits which, in the Central region, are often stiffened by means of wooden sticks and wound with strips of skin or bead-embroidered cloth.

Tattooing is known to all Eskimos, but is nearly everywhere confined to the women. Commonest are designs on chin, brow and cheeks; but among the Netsilik group, where the practice is perhaps most developed, arms, legs and breasts are also decorated with the characteristic, blue-black patterns. As to the technique itself, it is interesting to note that the pricking method occurs commonly in the Central regions, but only sporadically outside them, whereas in the peripheral regions the tattoo lines are usually made by sewing the skin with a sooted thread. Among the American Indians this method is known to a few tribes only in the north-west and it is undoubtedly derived from Siberia, where it is so common that the Russian word vyshivat, embroider, is the term for tattoo. Neither of the methods can be pleasant, but fashion was ever a stern mistress; for, as Hans Egede said of the West Greenlanders in olden days: 'If the face be not thus embroidered, the head, they say, becometh a grease tub which shall be placed under the lamp when they come to Heaven or the Land of the Soul.' The Netsilik Eskimos believe that insufficiently tattooed women after death go to 'the land of the crest-fallen' (see p. 161). This seems to indicate that also magical ideas were connected with this custom.

A dress as complete as that of the Eskimos naturally puts a certain limit on ornaments, which so frequently offer a field in which the imagination of primitive peoples can achieve grotesque triumphs. Ornamenting of the body itself is rarest in the more backward regions towards the east, where the people are content with ear ornaments, bracelets and necklaces made of strips of skin and beads (which replace fish vertebrae, sometimes dyed in blood), of seal and bear teeth, or the tarsal bones of the fox.

Among the Western tribes the face is painted on ceremonial occasions or prior to great events such as whale hunts and hunting for sea-otter, and at festivals eagle down is strewn in the hair. Simple brow bands with feather decoration and tufts of caribou whiskers are also known. The men have also labrets of stone or ivory in the corners of the mouth, and among the Aleut and Pacific Eskimos the barbaric splendour finally culminated in rows of beaded strings worn along the margins of the ears, pegs in the corners of the mouth and lower lip, and a bone pin or dentalium shell through the cartilage of the nose. There is no doubt that in many cases ornaments and face-painting had a magical significance among the Eskimos as, indeed, among most primitive peoples.

In house building, the merciless Arctic has brought the Eskimos face to face with a new problem. Even if walls of stone and turf are comparatively easy to construct, the roof, with its need for support, always presents a difficulty, for in many regions timber is very scarce. On the other hand, the long winter provides a material which cannot be used to the same extent elsewhere, the snow.

Among the Central Eskimos, and to some extent in Labrador, the snow-house is the sole winter dwelling. In the Thule District in Greenland and in northern Alaska, however, where houses of more solid material are used, it serves only as a travelling and hunting hut. As a hunting hut it is particularly suitable, for it can be built just as easily on the ice out on the hunting grounds as on shore. In the southern parts of Greenland and Alaska it is not known, although there is evidence of its occurrence in the former at an earlier period.

Of particular simplicity is the snow-house of the inland dwellers in North Alaska, where it is really only a dome-shaped hut with a frame of willow sticks and covered with snow. When the hut is finished, heated rocks are carried inside and left there until the walls begin to melt. Then the rocks are taken out and the walls are allowed to freeze, after which the willow frame is removed and the hut is ready for use. This obviously very primitive form is, I was informed by Professor Bogoraz of

¹ It is one of the common fallacies concerning the Eskimos that an 'igloo' is a snow-hut. Actually *igdlo* is the term for any house, whether built of snow, timber or stones, from northern Alaska right to Greenland.

Leningrad, also used by some of the Koryak (the Kerek tribe). In other regions, however, there is no support whatever for the walls and roof of the snow-hut. For a building implement the Eskimos use a knife of whalebone or antler. The builder selects a spot where the snow is sufficiently hard and of the right consistency (among the Central Eskimos this is ascertained by means of a special 'snow probe'), and proceeds to cut large, rectangular blocks which are laid together in an ascending spiral. The dug-out hollow in the snow forms the sunken floor of the house itself. Each block is trimmed with the knife to fit its predecessor and also those underneath and is pushed into place with a vigorous blow of the fist. The work proceeds with astonishing speed. The circle is gradually narrowed and the blocks placed so that they incline more and more inwards; thus finally a regular dome is formed which only needs blocking up at the joints to be ready for habitation.

In this way the Eskimos erect a warm and comfortable dwelling in the course of an hour or so. Inside the house, platforms of snow are made at the sides and rear, and a slab of clear freshwater ice is put into the wall as a window. The larger, rear platform, over which mats of heather twigs are first spread and then skins of caribou, bear, or musk-ox, is the centre of the family life, being table and chair by day and bed by night. On the smaller side platforms stand the lamp and other household utensils. In the event of the family staying at the spot for some time several smaller domes are built in front of the dwelling to serve as store rooms and kennels for the dogs. These also act as a 'cold trap' that prevents the cold outer air from coming directly into the house, the floor of which is a few inches higher than those of the ante-rooms. A whole complex of snow-houses with a common entrance sometimes rises when several families join together. It is thus possible to visit neighbours without having to go outside into the blizzard. If the house is to be used for festivals it often attains imposing dimensions. Stefánsson mentions a snow-dome among the Copper Eskimos that was over ten yards in diameter and could hold a hundred people.

There is of course a limit to the temperature that can be reached before roof and walls begin to drip; but the contrast to the biting cold outside is so great that even one or two degrees of warmth feel like comfortable room temperature. Later, when the walls have lost their dazzling whiteness behind a layer of

soot, and through the repeated thawing and freezing have turned to ice, the house becomes both colder and less comfortable; but outside there is no lack of space or snow for building a new one. A great improvement, which curiously enough seems to be limited to Baffin Island and the Iglulik group, is lining the house inside with a skin hanging. With this it is actually possible to experience all the climatic belts of the world at once: at the feet temperature is still Arctic, waist-high the surrounding air is almost temperate, and the head sometimes projects a good way into the tropics.

Although direct proof is lacking there is some reason for believing that the dome-shaped hut, the prototype of the snowhouse, is the original dwelling of the Eskimos. In most regions, however, it has been replaced by other types with low walls and a pyramidal or more or less conical roof. In Alaska, where timber and drift-wood exist in large quantities, the houses are, except in the woodless Yukon delta, built entirely of timber and covered on the outside with sod and earth. Characteristic dwellings of this kind are found along the coasts of the Bering Sea and among the inland tribes, the principal difference being that among the latter the house is somewhat less solidly built. It is square or sub-rectangular, a little more than nine feet long and approximately of the same width, and the floor is dug into the ground, which thus forms the lower part of the walls. Along three sides of the room there are low platforms of earth, which are simply left over from the excavation. In the centre of the house there is an open fireplace, from which it receives its warmth; the lamp serves merely for lighting. The roof is constructed of timber in the shape of a truncated pyramid resting on four central poles, between which the smoke hole is found. The whole building is covered with earth. In the coastal dwellings there is also an ante-room and a long sunken entrance passage, or in some cases a passage above-ground for summer use and one below-ground for winter, while in those of the interior there is only a small porch.

The house at the mouth of the Mackenzie, which has given rise to some unfounded hypotheses (unfortunately I was myself the originator of one), is actually nothing but a slightly modified variety of this type. In other cases the difference is greater. Among the Aleut the entrance passage had disappeared, and the entrance was by means of a notched tree trunk through the

roof. This is paralleled among several other tribes in adjacent areas such as the Koryak and Kamchadal and the plateau tribes in British Columbia. Within the Aleut house there were separate compartments used as sleeping-rooms, and others used for sweat baths. The Chugach of Prince William Sound had real plank houses, slightly resembling those of the Tlingit.

The Alaskan house needs an amount of wood that can be found only in a few places within the Eskimo area, and consequently another type of habitation is generally found along the Arctic coasts, viz. an earth lodge which is dug a little way down into the soil and the roof of which is supported by whale jawbones or ribs resting on a low wall of skulls and vertebrae. Here there is no fireplace, and the heating is done by means of the blubber lamp alone. There is therefore no smoke-hole in the roof, and a window pane of gut skin is placed above the entrance passage. Under special conditions other material than bones has been used for roof beams and walls. At Point Barrow there is a simple four-sided plank house with a single ridge pole, from which the roof slopes towards the front and back walls. Even though the history of this type is not quite clear, there is some reason to believe that it is a local modification of the 'whalebone house' which has, so to speak, been 'translated' into timber as a result of the abundant supply of drift-wood. The connexion with the 'whalebone house' is more obvious on Southampton Island and in the Thule District in Greenland, where the bones have been replaced by stones. As one writer aptly puts it, these Polar Eskimo houses closely resemble gigantic tortoises resting on the ground with head and neck stretched well out in front of the arched shell. Through a low and narrow entrance passage, about three yards long and sloping gently downwards from the doorway, we crawl up over a step and find ourselves on the stone-paved floor in the one room of the house. It is small, barely four yards long, three and half wide in front and narrowing off towards the rear. The back part of the room is entirely occupied by a low stone platform, which is covered with a layer of fragrant hay on which soft caribou and bear skins are spread. In front of it to each side, where the room is widest, are the usual side platforms for the lamps.

The most admirable feature of this building is its manner of construction, for the Eskimos have themselves invented the same cantilever system that is used in modern bridges: at various

points large stone slabs project over the low walls; their outer ends are held down by large stones which act as a counterbalance, whilst their inner ends bear a large slab of stone that closes the roof at the top. It is obvious that the converging stones have their prototype in the whale bones of former times. The whole dome is covered with sods. Above the entrance there is a window of gut-skin strips sewn together, and this allows a soft, subdued light to enter. It goes without saying that the air in these small rooms, heated by blubber lamps and heavy with the effluvia of many more or less naked and more or less clean people, is not exactly attractive to a sensitive nature. And yet it is not so bad as one might think. Fresh air comes in through the entrance passage, and there is a hole in the roof, the 'nostril' of the house, through which the bad air streams out into the cold like white vapour.

The 'whalebone lodge' formerly existed throughout the whole Eskimo region from Greenland and Labrador to the extreme point of Asia, but it is no longer in use, though it is not many years since it was discarded in Labrador and northeastern Asia. Mention of the 'whalebone house' in Greenland occurs as long ago as the time of the Renaissance (Erik Walkendorf, Olaus Magnus); but the last time it was found in use there was in 1652. From the Central region, where nowadays the snow-house is used in winter, many ruins of these whalebone dwellings have been recorded.

Whereas in the Central regions it is the snow-house that has superseded the whalebone house, in Greenland, outside the Thule District, it has been ousted by earth houses with rectangular ground plan. They seem to have appeared first in the region of Disko Bay in the seventeenth century. They are large, four-sided communal dwellings, the rear wall of which is not infrequently dug into a hill-slope, so that the roof at the rear is level with the surface of the ground. The walls are of stone and turf and the front wall pierced by gut-skin windows, one of which is placed over the long low entrance passage. The roof rests upon a long beam of drift-wood supported by a number of posts. Apart from the difference in size, the interior arrangement corresponds to that of the Thule District house. It is a single room occupied by several families, with stone-paved floor and skin-clad walls. Along the rear wall rises the large platform of stone, turf and planks, divided into family bays by

Caribou Eskimo woman's jacket of white and dark deer skin

National Museum, Copenhagen





Woman's jacket of the Kodiak Eskimo type made of cormorant skins

National Museum, Copenhagen



An Iglulik snow-hut village on the ice off Melville Peninsula



Polar Eskimo winter house. It is abandoned for the summer, and the gutskin pane over the entrance is removed. The openings to the right and left of the door lead into store rooms built at the side of the passage

means of outstretched skins. A family has no great amount of room. Holm relates that a platform space less than a yard and a half in width had to suffice for a man with two wives and six children! This house type was used until the nineteenth century on the west coast and even later in East Greenland.

The snow-houses, and also to some extent the blubber-sodden, wet earth lodges, are uninhabitable in summer, and the Eskimos then move into tents. Only by the Bering Sea, where various obscure culture contacts have resulted in a number of complications, is the tent not used, but a lightly built wooden house instead. Remarkable dwellings are the skin-clad pile houses which are inhabited by the Eskimos on the almost inaccessible rock islands in Bering Strait. Pile buildings are also mentioned from the Aleut, and on the mainland they are used for storage purposes. They are without doubt connected with similar types in Kamchatka.

When a number of quite different types of dwelling occur among the same people, it may be taken that there has been either internal development or an influence from the outside, or perhaps both. A people that is primitive in the real sense of the word does not possess such a variety of types as has been found among the Eskimos, in both winter houses and also, as will be seen, in summer dwellings in the Western regions. For in shape the tents, too, vary greatly, and indeed the only factor they have in common is their covering of caribou, seal or, more rarely, walrus skin. The simplest are the dome-shaped tents. These are used, especially by the inland tribes, in northern Alaska and on the Mackenzie River, and, as has already been stated (cf. p. 120), are the undoubted ancestors of the snowhouse. This alone is enough to mark them as being ancient. Another ancient, but probably somewhat later, type has been derived from a simple wind screen and is principally a native of the east, for instance of Greenland, but can also be traced in the west among the Aleut (and Chukchi). Its typical feature is a ridge pole resting upon upright posts; against these a number of poles lean obliquely on one side. In regions where wood is very scarce there is only a single post bearing a very short ridge pole fitted by a socket, and the oblique poles are replaced by an outstretched thong. The conical tent, which occurs towards the west and sometimes among the Central Eskimos, is doubtless of later origin than the above. Various details in construction

may indicate, however, that while among the Central tribes it derives from the northern Indians, it has reached Alaska from some other source, possibly Asia. Finally, the heavy double tent of the Asiatic Eskimos, nowadays used in winter too, is without doubt adopted from the Chukchi. There are therefore a number of different types, which lead one to suspect that Eskimo culture has a long and complicated history behind it.

If we had crawled into one of the big houses in East Greenland at Angmagssalik one or two generations ago, we should have found an outfit of household utensils that, though limited in kind, was both suitable to their purpose and very well made.

At each 'bay' stands the blubber lamp of the particular housewife. The lamp is, so to speak, the centre of the family and more than that. It is true that, as we have seen, the Eskimos in the interior of northern Alaska and south of Bering Strait heat their houses with a fire and use the lamp for illumination only, while the inland people of the Barren Grounds cook over heather fires and, instead of the highly developed blubber lamp of other tribes, content themselves with a naturally hollowed or barely worked stone. But there are enormous stretches of country where there is neither enough drift-wood nor heather for fires. There the lamp is a necessity, without which life would be impossible. The lamp, and the ice hunting which provides the blubber, are thus the corner-stones on which the greater part of the Eskimo culture has been built, the foundation which makes it independent of vegetation and enables it to spread over regions where any other culture would perish. The rather insignificant appearance of the lamp in no way corresponds to its fundamental importance. It sometimes attains considerable size, but it is everywhere, with comparatively slight alterations, a wide, more or less half-moon-shaped bowl cut out of soft soapstone; in southern Alaska and on the Aleutians alone are rounder forms used, of clay or a hard, crystalline rock. The blubber is placed in the curved back of the bowl, and along the front edge is laid a wick of moss. The lamp burns all day and most of the night; it emits a soft and pleasant light as well as considerable heat and, when it is properly attended to, never smokes; this last, however, requires a certain amount of practice.

Fire was originally obtained by means of a fire drill worked by a thong, or (principally in the Central regions) by striking two pieces of pyrites together. To return to the Angmagssalik house: over the lamp hangs the soapstone cooking pot, in which the meat is cooked. This, too, is in all essentials the same everywhere, though in Alaska it is replaced by earthenware jars. Soapstone does not occur west of the Copper Eskimo region, and, even though there was apparently a brisk export of lamps to the west in former days, the absence of local soapstone has obviously had a certain stimulating influence on the pottery-making of the Alaskan Eskimos. Still, Eskimo pottery always remained at a low technical level. Among the inland tribes of northern Alaska and among the Aleut and Pacific Eskimos an apparently old-fashioned cooking method occurred, viz. 'stone boiling' by dropping heated rocks into bark vessels or finely woven baskets.

When the meat is cooked, it is fished out with a bone fork and laid upon bowls and dishes of wood of varying sizes and shapes, each one cut out of a single piece and usually furnished with handsome bone mounting along the upper edge to prevent the wood from fraying. The Angmagssalik Eskimos do not, however, know the extremely beautiful bowls in animal forms which their deft-handed kinsmen in Alaska have apparently learned to carve from the North Pacific Indians. Of wood, and elsewhere of musk-ox and mountain-sheep horn, they make spoons, large dippers and soup ladles. Beside the lamp stands the indispensable water-pail, which at Angmagssalik and in West Greenland is of excellent cooper work and not only furnished with bone mounting but is ornamented on the sides with a number of carved and nailed-on ivory figures of human beings and aquatic mammals. The coopering technique is undoubtedly the result of early European influence, for it was elsewhere unknown throughout the whole of aboriginal America, while in Denmark it goes back to at any rate the last period of the early Iron Age (third to fifth century A.D.). In Greenland it does not appear till the medieval period. Outside Greenland skin water-pails and in Alaska birch-bark vessels are often used. Blubber is preserved in oval tubs with flat bottoms and sides of thinly scraped wood strips, or, where whaling is pursued, of wide baleen strips whose two ends are brought together and sewn. Water dippers of wood and skin are known, but in winter when the pail is full of ice or frozen snow and the water collects at the bottom, or in spring when the lips are inclined to split, a sucking tube of wood or bone is used.

Over every lamp hangs a large shelf of laths or, in the Central regions, a ring with coarse netting on which damp clothing is laid to dry. Belongings not in use at the moment are kept in skin bags. In some regions the Eskimos make a kind of coiled basketry of grass or willow roots, and in Alaska twined work exists; in fact, the Aleutian Islands are one of the great centres of the latter technique in North America. The material used is here the ordinary strand wheat (Elymus mollis). Sewing needles, which were originally made of bird bone, walrus ivory, etc., had to be stored with especial care owing to the difficulty of their manufacture, and at Angmagssalik they were therefore stuck into prettily embroidered, triangular needle skins, whereas in almost all other places beautifully made needle cases of ivory are used.

Underneath the platform is the lumber room. In it go meat dishes and blubber trays when not in use; there stand the men's boxes for tools and small possessions; there lie rolled-up skins and, let us not forget, the urine bowls, the contents of which do not exactly increase the sweetness of the over-crowded, warm room. As we have seen, urine is used in certain regions for washing and is also necessary for a certain form of skin curing. It may also happen that under the platform lies a bitch with pups which are still too young to stand the winter cold, besides all the astonishing junk that an Eskimo housewife cannot find it in her heart to part with.

There is a tale told in Greenland of a great hunter who loved his settlement so much that he never left it, and on the only occasion that he could be induced to go on a journey, he was so affected at seeing his home again that his heart broke, when from his old mountains he saw the sun rise over the sea and its rays break against the icebergs on the horizon. There is in this little legend a hymn to 'home' more heartselt than is usually credited to a 'primitive' people; but there is also an implied wonder at something strange, that a man can grow so attached to one place, for the Eskimos - here I do not refer to the West Greenlanders of to-day - are a wandering people. Even where there are permanent winter houses it was originally the exception for a family to live in the same settlement for more than a few years at a time. The houses were common property; when tent time came to an end, the man who repaired a house and moved into it had the right to live there during the coming

Pile-dwellings on King Island in Bering Strait





Caribou I skimo tent on the iccbound shore of Hudson Bay

Polar Eskimo using the bow drill





West Greenland woman scraping a scal skin

winter. And yet an Eskimo's house is more to him than the place in which he happens to sleep. The cold in winter and the mosquito plague in summer make it a real home.

It is naturally the women who spend most of their time inside its walls. They rise early; the great heroes of the Eskimo legends are always very early risers, and as a rule the husband has had a hasty breakfast of frozen meat or the like and sets out for the hunting ground before dawn. The women are always awake before the men to light the lamp; but once they are gone they have the day to themselves. Let it be said at once that the old conception of the Eskimo women as the 'slaves' and 'beasts of burden' of the men is completely erroneous. There are, of course, brutal husbands among this people as elsewhere, and, taking into consideration the lack of self-control of the primitive mind, it is not surprising that a husband's anger now and then may end up in a thrashing for his wife; but a census would certainly show a higher percentage of henpecked husbands among the Eskimos than in a civilized country (except, perhaps, the United States!): most Eskimos have a deeply rooted respect for their wives' tongues.

This same tongue is used diligently during the course of the day, when gossip flourishes in each other's houses or tents; but it would be unjust to accuse the women of laziness. Apart from cooking, their main work consists in flaying the kill, except in the case of large animals such as whale and walrus, curing skins and sewing. In Alaska they also make baskets and the coarse, poorly baked earthenware; as regards pottery, finds of sherds during the excavations of the Fifth Thule Expedition show that its use extended formerly as far east as to King William Island and Repulse Bay, where it has now been entirely lost.

Skin tanning in the proper sense is unknown in the aboriginal Eskimo culture, but the skin of aquatic mammals and birds contains so much fat that their treatment, even though it aims at removing the fat, has nevertheless the character of a primitive grease tanning. The skin is cleansed of remnants of flesh and is scraped and softened with stone and bone scrapers of various forms. These are for the most part held in the one hand; two-handed scrapers have an exceedingly wide distribution both in Siberia and among the Indians of North America, but are only found very sporadically among the Eskimos. The skin of land animals is treated exclusively by scraping. It is hard work

to prepare a large deer skin in this manner and the men often give their women a helping hand; but the result is, at any rate among the Central tribes, who excel in this art, a skin so supple and inviting that it can scarcely be equalled elsewhere. Bird skins cannot of course stand scraping, so are partly chewed to free them of fat, thus combining in an easy manner the useful with the agreeable.

In the case of the skins of aquatic mammals, especially where depilated, waterproof skins are required, a very simple chemical treatment precedes the purely mechanical process; but here as in so many other aspects of culture, there is a great difference between the Central regions, where the skin is treated with hot water, and the marginal regions to the east and west, where they are soaked in urine. White seal skin, that is to say skin from which not only the hair but also the black epidermis has been removed, is obtained either by scalding the skin or letting it lie rolled up with the blubber attached until the latter turns rancid; one special kind is dried in frost, which gives it a fine, creamy colour, different from the other whitish-yellow skins. In Alaska there is a genuine tanning process with fish roe, just as in one or two areas the skin is rubbed with brains and then smoked; these methods have, however, been borrowed from neighbouring peoples.

The Eskimos are very skilled with the needle. Of the large number of garments from all areas which I have in the course of time had an opportunity of examining, only a very small minority were badly made; the stitches often lie as closely and regularly as if machine-made. The thread is of split sinew, and the stitches are the same as ours: running stich, overcasting and 'blind stitch', in which the needle is only taken half-way through the skin. On the other hand the method of sewing is different from ours; the Eskimo women put their thimble of thick skin on the index finger and sew from right to left. Their dexterity with the needle is not only admirable from a purely technical point of view; their good sense of colour and attractive patterns often put their work on a level with the finest productions of primitive ornament.

As the time approaches for the men to return home from the hunt, the cooking pot is pushed over the lamp. A husband who comes home after an exhausting day in biting cold does not as a rule like waiting for his food. The principal meal of the day

- the only one the men get apart from the scanty breakfast - is therefore eaten on their return in the evening. The menu does not offer much variety.

'And yet' (relates that fine old merchant Dalager in his Grønlandske Relationer, 1752), 'a wealthy Greenlander regaled me and three other worthy Greenlanders, of whom two were Angekoks (shamans), with ten substantial courses, at which I will beg the courteous reader not to be disgusted if I now specify them in the proper order: (1) We had small dried herrings (capelans), which always form the first dish. (2) We had dried seal meat. (3) Cooked ditto. (4) Putrefied ditto. (5) Cooked guillemots. (6) a piece of raw whale's tail. For this alone were we invited, just as among ourselves we invite our guests to the greatest delicacy, such as a leg of venison, but nevertheless the rest of the table is strewn with some dozen different dishes. (7) We had dried salmon. (8) Dried caribou meat. (9) and (10) were the sweets consisting of whortleberries mixed with caribou stomach-muck and seal oil. This was not exactly to my taste, wherefore I only ate but little of it, and even, in order not to waste the former good meal, thought it best to close with a glass of French brandy.'

If the husband brings game home with him, it is the duty of the wife to flay it. For this work she uses the indispensable woman's knife or ulo, which formerly had a stone blade shaped like a sector of an ellipse. This shape has been retained for the later metal blades in the west, while in the east it is more anchorshaped. The flaying proceeds with rapidity and certainty and with a skill which reveals a knowledge of anatomy and the practice of generations. Just rolling up her sleeves, a Greenland woman can flay a seal without getting a spot of blood on her clothing or on the floor. And yet her dexterity may be surpassed by the Aleuts, whose anatomical knowledge is said to be astonishing.

With the end of the meal, comes the time for the men to discuss the happenings of the day, to smoke a pipe (tobacco has now been introduced everywhere) and to repair their implements or make new ones. In their original state the Eskimos were a Stone Age people. We all know the famous tripartite division of prehistoric times into Stone, Bronze and Iron Ages; but we must realize first of all that this division is schematic,

and secondly that it refers especially to the European, more especially the South Scandinavian area. Being schematic the lines of separation are necessarily artificial. It must also be remembered that a wide use of stone is of course dependent upon the presence of that material. On the enormous fluvial plains of South America, for instance, stone is almost entirely lacking, and hard wood, bone and shells have to take its place. Finally and most important of all: the use of this or that material for edged tools and other objects need not reflect the stage of culture as a whole. It is an incontrovertible fact that there is a much greater cultural difference between the hunters of the kitchen-midden period of Denmark and the farming and cattle-breeding people of the dolmens than there is between the latter and the people of the Bronze Age; and what a cultural distance there was between the Polynesians, with their agriculture, their outstanding seamanship, their highly developed social order and religion, and, for instance, the poverty-stricken and shivering bands of Tierra del Fuego.

Consequently, when we call the Eskimos a Stone Age people, we mean that for their cutting implements, etc., they use certain materials, but neither more nor less. The term implies no valuation of their cultural level in general and not even of their technical skill. The climax of artistic sense and manual skill which can be evoked in flint working is shown by the products of such places as Egypt and Denmark. Look, for instance, at the flaked arrow heads, thin as paper, or the beautifully formed daggers from the close of the Danish Stone Age, with their glimmering play of light on the lamellar flaking of the surface. The archaeologist will as a rule search in vain for anything even approximating this skill in a collection of Eskimo relics. Only in the earliest periods of Eskimo culture do we find specimens that stand out above the fair average. The Eskimos have been satisfied to produce useful implements and have not attached much weight to appearance. The material, too, is poorer; their flint is coarse and occurs only sporadically, and minerals such as chalcedony, jasper, and agate, which have a scaly fracture similar to flint, are more capricious and refractory to work. The procedure was this: the core was first roughly chipped or split into large flakes and these were then more finely trimmed by pressure which removed smaller flakes. In the Western regions and Southampton Island, where the Stone Age lasted until very recent times, we find the flint flaker, a small implement of antler or ivory set in a handle; with this implement the worker presses off flakes from the piece of flint, which is held in the mitten-protected left hand. More satisfactory are the less brittle stones such as sandstone and especially slate, which are worked by rubbing and polishing so that they recall their favourite materials, bone, antler and walrus ivory. Highest in a technical sense among this group are the objects of that beautiful, but tremendously tough and difficult, green jade, which occurs only in Alaska but has been spread by barter eastwards as far as Hudson Bay.

While the igneous rocks have almost never been used by most Eskimos, the Pacific group and the Aleut in this as in so many other respects are in a separate position. The hard, crystalline materials cannot be treated like other stones, but require a special method of working, the so-called pecking technique, carried out with a rather oblong, egg-shaped hammer stone. In America its classic area is the North Pacific coast, from where it probably spread to the Pacific Eskimo territory.

Even though for all practical purposes the Eskimos lived in a stone age right down to the period of European contact, they had nevertheless some knowledge of metal from rather early times. In sites from the so-called Ipiutaq Culture, one of the early forms of Eskimo Culture (see p.188), a few scraps of iron were found, probably originating from Siberia. The Aleut and Pacific tribes often succeeded in getting iron from shipwrecked Japanese vessels. Iron was, however, so valuable that the Chugach had a curious custom on the occasion of such a find: when a person found a piece of metal he lay down immediately inside the door of the house with the piece of iron at his side, so that anybody entering would step over him; this was called tjavingitlurruaraluni, 'to find a piece of iron to cut with', and was supposed to bring luck.

Only two other Eskimo groups, the Copper Eskimos and the Greenlanders, have worked metal in some quantity, viz. copper and iron respectively, by cold hammering, that is to say, by the same method as any other 'stone'. Jenness has advanced good arguments in favour of the theory that the copper technique in the Central regions is fairly recent and was derived from the neighbouring Indians. Exposed native copper occurs in several places and is easily worked. The iron used by

the Polar Eskimos in Greenland was obtained from the large meteors in the vicinity of Cape York, and the West Greenlanders worked the telluric iron found in the basalt on the northern part of their coast. The latter at any rate is of such a brittle and unsuitable nature that it is most probable the Eskimos must have first learned the properties of iron from metal of better quality, and, if this be so, one's thoughts turn involuntarily towards the old Norsemen. The Eskimos could not avoid seeing the metal in their possession 'and they still dig every day for nails and iron in the houses of the Christians', as it is very significantly put in the account of a journey in the middle of the seventeenth century. In these circumstances it is not astonishing that Frobisher in 1578 found 'a boxe of small nayles' and 'a tryvet of yron' in the possession of the West Greenlanders. However, in his description of Meta Incognita, i.e. Southern Baffin Island, in the same report he also mentions arrows headed with iron. The problem is whether here he refers to the natives of Greenland or - what is most likely from the context - of Baffin Island. In the latter case, can they have got the iron from Basque fishermen and whalers who happened to come so far north of Newfoundland?

The Eskimos have advanced farther in wood working than in stone working. Careful lashing, riveting and scarfing are methods that have long been known, and they are also acquainted with a simple form of mortising. Grooving, dovetailing and genuine tenoning were, on the other hand, originally unknown, as was also the coopering technique mentioned earlier. The first rough chopping is done with the adze, which in most cases is a rather small stone edge inserted in a head of antler. The Pacific Eskimos, who live in a partly wooded country, had also a heavy splitting adze like that of the North-west Coast Indians. Holes are bored with a drill which is held at the top by a mouthpiece and turned by means of a bow. Formerly this also served as a kind of saw, large pieces of wood being split by first drilling a row of holes close together. Finer work is done with a crooked whittling knife of a type very widely distributed in East Siberia and northern North America. Archaeological finds in both Eskimo and Indian territories have shown that the early form of whittling knife instead of a crooked iron blade had a stone blade set in a bent haft; but how and where the conversion to the modern iron implement took place is not yet

known. The beaver-tooth knife, another wide-spread Indian tool, is also used by the Alaskan Eskimos.

In the carving of bone and of walrus and narwhal ivory handicraft reaches its highest degree of skill; but, strangely enough, in this decorative and artistic sphere we again find a marked difference between the Central tribes and the Eskimos of the marginal areas. Even at the beginning of the seventeenth century Baffin remarked that the objects he saw on some of the small islands in Hudson Strait were much poorer in workmanship than those he had just observed in Greenland. To this day the implements of the Central Eskimos are in finish much inferior to those of the Greenlanders and Alaskan Eskimos, although the destructive European influence among the latter began as early, if not earlier. The Central tribes have no ornament beyond quite simple, incised linear designs, whereas in the west we find etched or painted pictures of animals and hunting on land and sea, of drum dances and fights and scenes from daily life coherently portrayed in a way which approaches a primitive picture-writing. In clear interpretation and lively reproduction the best of them are in no way inferior to the Palaeolithic art in the caves of France and Spain. Sometimes, however, the representations are very poor, as, e.g., in the South-Alaskan rock paintings, which were apparently connected with the whaling rites.

In Alaska especially, but also in Greenland, we find certain definite ornamental forms; combs and buckles, for instance, are embellished with a figure representing the tail fin of a whale or the hindquarters of a seal. In East Greenland the eye shades are often completely covered with mounts of ivory lace-work in different patterns, and the wood of water-pails and throwing boards can scarcely be seen between the applied figures of men and women, aquatic animals and mystic beings, yet this profuse decoration never appears excessive. The love of decoration has also led to attempts at sculpture, which are found both on the Bering Sea and in Greenland. Buttons and buckles for kayak thongs are made in the form of seals, white whales, fish and other game, the toggle of a mitten clasp becomes a ptarmigan, the haft of a sewing knife, a trout, and the needle case is shaped like a human being; a sea-bird forms the buckle of the nape-thong of the kayak-frock, and so on. In some cases the motives for this work may be connected with magic. The

decoration of the implements has not the mere value of beauty to the mind of the Alaskan Eskimos but refers to important events in the life of their ancestors. Moreover, they believe that the game animals prefer to be killed by means of nicely made weapons. No doubt most people will shrug their shoulders at the sight of these primitive carvings and pictures. And primitive they certainly are! The principle of repetition, which is so important in arousing any sensation of pleasure and therefore also the understanding of art, is but rarely expressed in a harmonious composition, and even rarely in an attempt at symmetry. Just as the Eskimos add syllable to syllable in their language and thus create long series of coherent ideas, they do not, as a rule, try to combine the details in their art to a balanced whole. Hardly ever do their designs and pictures aim at anything but covering as much as possible of the surface. In the pictures of the Alaskan Eskimos the details are sometimes seen from the viewpoint of the observer, sometimes from that of the acting person, and sometimes even from both, in the most unnatural manner. The very primitiveness of this art makes it the more interesting, because we see how practical considerations, religious ideas and idle play all share in its development. It is an art which shows that even under the hardest struggle for life the sense of the beautiful still flourishes. That art in Alaska occupied a considerably high stage in prehistoric times is a fact to which we shall revert at a later opportunity (pp. 187 ff.).

CHAPTER VII

The Society

'HERE is no Eskimo community', and 'The Eskimos live in a state of communism', are sayings one often hears; both are however incorrect, and the former especially so. It is obvious that the immense wastes and the small population are factors which in themselves prohibit a highly organized society. Conditions in the Arctic have resulted in an almost extravagant perfection of Eskimo material culture, both directly by independent invention and indirectly by adoption from the outside such elements as were suited to their mode of life; but these conditions have at the same time resulted in the stagnation of the society as such. We find here a case of that onesidedness in cultural development which is common among primitive peoples. The same onesidedness, though in a directly opposite direction, can be observed among the aborigines of Australia, whose extraordinarily complicated social system would seem almost incompatible with their extremely poor material culture. It is probable here that physical conditions have placed insurmountable barriers in the way of material development, but have not been able to prevent the entry of higher social forms.

Even while the Eskimo society nearly everywhere and in almost every respect is at the lowest imaginable level of organization, it does nevertheless exist. This is in itself not surprising, for the formation of the society is scarcely human in the sense that it has only begun *after* the formation of the specific character of man.

The permanent core in Eskimo society is the oldest of all social institutions: marriage. There was a time when primordial man was thought of as living in promiscuously mating hordes. Such a condition is however most improbable. The work of the great Finnish sociologist, Westermarck, which decisively broke with the old belief, is significantly enough called *The History of*

Human Marriage, thus emphasizing that marriage is not an institution peculiar to Homo Sapiens but exists in rudimentary form among animals also.

It is therefore not surprising that the Eskimos regard the unmarried state as unnatural in adults, and the rule is that the men marry as soon as they can hunt sufficient food to keep a wife, the girls on reaching puberty and sometimes even before. No formal rules of courtship are found, no more than the rules of obligatory marriages. There are traces of the ancient marriage by capture. It still happens among the primitive Netsilik Eskimos that a man takes a wife from another who is weaker than himself, and my 'adoptive father' on the Barren Grounds, one of the most powerful shamans of the Caribou Eskimos, had in cold blood exterminated the whole of his first wife's family because it had opposed the marriage. Sham elopements are arranged among the Kobuk tribes. The Asiatic Eskimos have to serve for the bride, as must also the Chukchi and Koryak. Bride-purchase is otherwise the usual procedure and, when the amount has been settled, the couple take up their abode together without any ceremony whatever, although a kind of wedding feast is reported from the Chugach.

There is practically no restriction in the choice of a wife. There are no rules that the bride must be taken from another settlement and no clan exogamy to be respected. The only essentials are that the parties must not be close blood relations or bear the same name; this is possible, as the Eskimos in many places do not differentiate between male and female names. At the same time the name is often looked upon as a kind of soul, so that two namesakes are regarded as being especially intimate with each other. In this connexion we must mention the Alaskan aversion to marriage between people with the same amulet, something that approaches totemism (see p. 141). The early Russian travellers reported that cross-cousin marriage existed among the Pacific Eskimos and the Aleut. This statement, however, is true only in so far as cross-cousins were allowed to marry, whereas it is doubtful if parallel cousins could do so, but it is not correct if it is taken as an obligation and is apparently confused with the custom of matrimonial rights between crosscousins mentioned below.

Polygyny is common among the most skilful hunters everywhere, though it is seldom that the number of wives exceeds

two. Nor is it unknown for the same woman to have more than one husband; this, however, is only general among the Netsilik tribes. Among them the killing of female children is so common that a girl who is not betrothed at birth is usually doomed, which leads of course to a great shortage of women. It is, however, far from being a fixed institution as, e.g., among the Tibetans but rather an extension of the common wife-lending. Polyandry has also been ascribed to the Aleut and Pacific Eskimos, a woman there having one or more additional spouses besides her ordinary husband. Sternberg and Jochelson regard this as a real case of group marriage, in which all cousins and brothers could demand matrimonial rights of each other's wives. According to our observations during the Dano-American Alaska Expedition, 1933, however, this view needs correction, at least so far as the natives of Prince William Sound are concerned. The rights in question only applied to cross-cousins and to brothers who had married a group of sisters, and in neither case was it a real marriage involving a common household. Among other Eskimos there are also found slight obligations on the part of younger brothers towards the wives of their elder brothers, such as to provide for them when their husbands are on a journey. According to Eskimo ideas, sexual rights would naturally follow on these obligations, and this may very well have given the impulse to a development such as the Aleutian. It is not to be denied, however, that the whole question requires further elucidation. A man may also marry his brother's widow or two sisters, but again it must be emphasized that he has no obligation to do so, and in some places it is definitely stated to be uncommon.

Niels Egede relates in one of his writings that

'a young man came to me from Grönne Islands and had with him a fox skin, which he offered me with these words: "I know that you are too decent and cleanly to do what I wish to have done; my wife is barren, you understand, but if you yourself will not, then command one of your sailors to make her pregnant." When I reproached him for his immodest speech, he answered: it is no shame, she is married and can have one of your married sailors. . . .'

Here we have in a nutshell the whole Eskimo attitude towards

marriage, its longing for offspring and the husband's right to dispose freely of his wife and himself. It is thus obvious that matrimonial constancy in a sexual sense cannot be and is not considered a particular virtue, nor is any restriction put on young girls prior to marriage. When a man punishes his wife for being unfaithful, it is because she has trespassed upon his rights; the next evening he will very probably lend her himself. Aleutian good manners even required that the men should place their wives at the disposal of their guests, a circumstance of which the Russian fur-hunters were not slow in taking advantage, and returned by spreading venereal diseases among the people. Furthermore, it is everywhere a common custom to exchange wives for a long or short period, and the husbands in these cases are so far from being jealous of one another that the exchange of wives is, on the contrary, considered to be one of the most effective means of emphasizing and strengthening a friendship. The conferring of sexual rights is an important social mechanism to create and cement a co-operative bond. In former days the East Greenlanders had a custom called 'the game of putting out the lamps', and in the large communal houses they used to give their visitors an opportunity of taking part in this evening entertainment.

It would be a great mistake, however, to see merely licentiousness and vice in these customs. Purely practical circumstances are often of importance. For instance, a man is going on a long journey and cannot do without female help for sewing and other tasks; if his wife is prevented from going with him, owing to sickness or pregnancy, he makes a temporary exchange with a friend, whose wife may perhaps want to visit her parents who live at some distance. In fact, however strange it may seem to us, that which a superficial application of European moral standards will condemn is in some cases the highest social duty. If a catastrophe is imminent there is a general exchange of wives in the settlement, presumably in the belief that by this means one, so to speak, changes one's identity and thus misleads the evil powers.

To this less solemn view of the bonds of matrimony corresponds the facility with which they can be dissolved; for if the parties do not like each other they simply go their own ways without further ado. Often young people go through the purgatory of three or four marriages before they settle down,

as usually happens when children arrive. All Eskimos are fond of children and set great store on having offspring, preferably boys, who will one day support them in their old age. A childless Eskimo will buy an adoptive son for a frying pan or a handful of nails. But the very desire for offspring has often led to infanticide. In order to increase the number of male births the infant girls are sometimes deliberately murdered, as their nursing would be an obstacle to a new pregnancy. There is no doubt that infanticide has in some degree occurred among all Eskimos in their original state, and, as has already been stated, it was at least a few years ago still present to a horrifying degree within the Netsilik group.

The children are looked upon as belonging equally to the father and the mother. The question has sometimes been raised as to whether patriliny or matriliny prevailed among the Eskimos, as it is often the case among primitive peoples that the children belong to the mother's kin group instead of to the father's. This question, however, cannot be asked in the case of the Eskimos as a people; they have no knowledge of either clan systems or the hereditary class distinctions which lie behind the genealogical interests of primitive peoples. Only far to the west along Bering Sea and especially on the Aleutian Islands do we, perhaps, find some faint traces of the matriliny in, for instance, the privileged position of the mother's brother in the family and in the fact that here a newly wedded couple as a rule will live in the village of the bride, at least for the first few years of their marriage. In an other respect, on the other hand, patrilineal descent is more stressed at the Bering Sea than among other Eskimos, since we have here a rather clear concept of patrilineal lineages, i.e., groups descending in the male line from a common ancestor. The principal tie uniting the lineage is the right to certain inherited amulets and secret hunting songs. Since nobody will eat the kind of animal from which his amulet is taken, and people possessing the same amulets avoid intermarriage because, as they say, that would reduce the power of the amulets in the village, this institution shows some resemblance to totemism. It differs, however, from true totemism in several ways. First the lineage is restricted to those whose common descent is definitely known, in other words it is not what is ordinarily known as a clan; besides, each person has a number of different amulets, he is not supposed to be descended from or identical with any of them, nor is he named after them; and finally lineage exogamy is common but is not an absolute rule.

The terms of relationship confirm the fact that descent is basically reckoned equally on the father's and the mother's side. It is well known that among a great many peoples kinship terminology differs so much from ours that at first sight it may seem quite meaningless, because it often refers more to the behaviour required between relatives than to their mutual affinity. This is not the case with the Eskimo system, which notwithstanding some peculiar features shows many points of resemblance to our own. On the whole it is remarkably uniform, although in a few cases different word stems may be employed and in others a slight shifting of the ordinary meaning has taken place. One characteristic is that siblings of the same sex as the speaker are distinguished according to age and not to sex. Thus a man will use the same word for his older brother as a woman will use for her older sister, and similarly the term for vounger brother of a man is identical with that for younger sister of a woman. For siblings of the opposite sex of the speaker there are separate words. On Nunivak parallel-cousins are classified as siblings, and among the Chugach a person, whether male or female, will call his or her brother's children by the same terms as those used for their own sons and daughters. So will also a woman, when her sister's children are concerned, whereas a man will classify his sister's children as siblings. The special ties between cross-cousins are suggested by the beforementioned customs of marriage and sexual intercourse. In Alaska there is also some sort of joking relationship between cross-cousins, who are allowed all kinds of mutual teasing. On the other hand the relations between brothers and sisters are here subject to some restraint; thus among the Chugach they will never speak to each other of their love affairs, and they are not supposed to joke with each other. In the case of children and parents-in-law the reserve results in a slight avoidance. A man will never speak to his mother-in-law except in case of necessity, and a woman will not speak to her mother-in-law unless the latter speaks first.

It follows naturally that among the Eskimos blood relatives feel themselves mutually attached in friendship and mutual helpfulness. But this is confined to the close family circle beyond

which there is no lasting social organization. The inhabitants of the same settlement and – where houses each used by several families are found - of the same house, certainly have some economic obligations towards each other in distributing the result of the hunt; but these disappear of themselves as soon as the fellowship is dissolved. One manifestation of the fellowship of the settlement, as long as it lasts, is also the meeting-house, qazge, qagsse or qalgi. In Alaska it is a real 'men's house' similar to those we find in many other parts of the world, for not only are the elaborate religious mask-feasts held there, but the house also provides the working and sleeping place for the male population of the settlement. The first time a stranger or a child visits this house he must purchase admission by means of a present to those who are there. At Point Hope there are six or seven *qalgit*, which are used mainly during the autumn ceremonies, but otherwise only now and then for incantations and as workshops. A boy belongs to the *qalgi* of his father, but there are no ceremonics at his admission. Among the Central tribes there is no permanent qazge; it is merely an especially large snow-house, or even only an annexe to one of the dwelling-houses, built when a dance festival is approaching. In Greenland, where the large communal houses made a special meeting-house superfluous, there are only faint and indefinite traces left of their former existence, and they were unknown on the Aleutians.

In the Bering Sea region there are also suggestions of tribal moieties, the male population being divided into Ravens or Falcons on the one side and Wolves or Ermines on the other. They dance separately at the so-called Bladder Feast (cf. p. 167), but unfortunately we are so far ignorant of whether membership is inherited or, if not, how it is obtained. At Point Hope the greater part of the inhabitants, but apparently not all of them, belong to either the People of the Land or to the People of the Sea, but this division holds good only in certain games such as football matches and the like; here a person belongs to the group of his namesake from whom he has got his amulets. On Baffin Island in the eastern Arctic the inhabitants of a settlement are divided into Ptarmigans and Ducks, i.e. those who are born during the winter and summer respectively. In

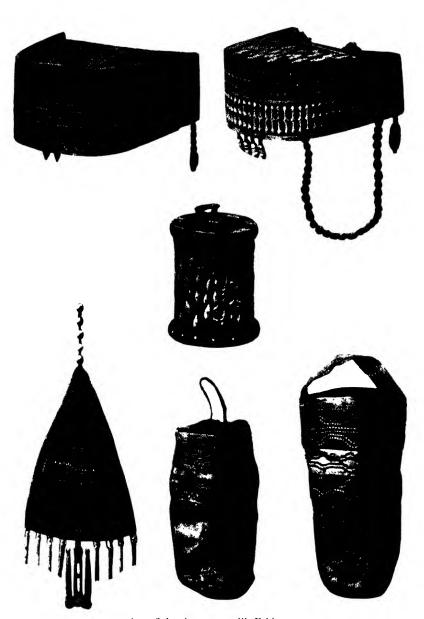
¹ Not family in the biological sense of parents and children, but 'joint families' including, e.g., widowed parents and also often adult siblings and their children.

the autumn these groups are matched in a tug-of-war with a seal thong, and if the Ducks win, the summer has triumphed and the weather is expected to be fair during the coming winter. There are no records of similar customs from other Eskimo tribes, though traces occur at the Mackenzie.

Still more remarkable are the traces of a kind of secret society among the Aleut and the Eskimos of southern Alaska, including the tribes of the Pacific coast. On certain occasions the members seem to have appeared wearing masks and disguised in cloaks of grass in order to intimidate the women and other uninitiated persons, who were severely beaten and otherwise maltreated. On the Aleutians they would kidnap one of the men, and a woman had to be given for a ransom; the man feigned to be dead but was restored to life, after which the woman was allowed to return. The Chugach described the members of the society as aqdlat, i.e. Winds, alluding to their swift and unexpected appearance, and asserted that in order to avoid their tormentors people would crouch at the fire holding up their thumbs like dog ears, for the aqdlat never bothered real dogs nor people acting like dogs.

We speak of Eskimo tribes; but in a political sense there are really no tribes. What is meant by this word is merely geographic groups which show a particularly close relationship in culture and language. Their purely geographic nature is also apparent from the very names, almost all of which consist of a place-name with the suffix -mio (plural: -miut), almost exactly corresponding to the English '-er'. When in the literature several of these 'tribes' are combined into bigger units such as the Netsilik group, the Copper Eskimos, and so on, it corresponds to the fact that the Eskimos outside the particular group as a rule regard it as a unit.

Thus among the Eskimos there is no state which makes use of their strength, no government to restrict their liberty of action. If anywhere there exists that community, built upon the basis of the free accord of free people, of which Kropotkin dreamt, it is to be found among these poor tribes neighbouring upon the North Pole. There is no rank or class among the Eskimos, who therefore must renounce that satisfaction, which Thackeray calls the true pleasure of life, of associating with one's inferiors. The Aleuts and the Pacific Eskimos, who had opportunities for developing warlike inclinations and acquiring new ideas while



Art of the Angmagssalik Eskimos
Wooden eyeshades.
Small pail with ivory mountings.
Needle skin and sewing bags with sewed-on ornaments

National Museum, Copenhagen



Caribou Eskimo woman carrying her baby on her back

in contact with the superior, North-west Coast Indian culture, alone had both slaves (prisoners of war) and hereditary chiefs; the latter planned the communal hunts of the villages and possessed, on the whole, a rather extensive power, although they might be deprived of their office, if they turned out to be unfitted.

Besides the head chief or tujuq there was also among the Chugach a secondary or assistant chief, sakânshik, whose duty it was to summon the villagers and announce the orders of his superior. Both designations are obviously of foreign origin (Yakut-Russian toyon, 'lord', and Russian zagonshchik, 'drover' or 'beater'), but the use of loan words does not prove that the offices were post-Russian, even if there is reason to believe that their position was greatly strengthened by the colonial authorities, who recognized the advantage of dealing with one or two men only. We find a similar double chieftainship among the Tanaina Indians at Cook Inlet and the tribes of the Northwest Coast and the inland plateaux at least as far south as Oregon. Among the Alaskan Eskimos and Aleuts there were also, as among the Chukchi, one or two 'strong men' in the village, who took the first place in the tribal feuds.

Otherwise all are of equal social position, and the one does not need to do what the other does. We must, however, emphasize the word need; for practice does not always accord with theory. The Eskimos to a high degree possess that primitive, wavering mind that does not willingly take an independent resolution, and in reality there will usually be an especially prominent personality at the settlement whom the others tacitly, and one may almost say half unconsciously, acknowledge as the first among equals. Most significantly he is among the Central tribes called isumataq, he who thinks, the implication being he who thinks for the others. But submission – if one may use such a word – is quite voluntary, and if for some reason or other he loses his authority he merely resumes his former position.

The first great unwritten law of the settlement is that no one may without reason avoid the struggle for food and clothing. He who does so is not allowed to starve; but he is despised and looked down on by everybody, Trapping grounds and hunting fields are the property of all and none, res nullius, which not even the 'tribe' can lay claim to. During the past two generations a number of Netsilik Eskimos have gradually made their way

to Repulse Bay, where the so-called Aivilingmiut, the most southerly tribe of the Iglulik group, have lived from early times; but though success in hunting is of course lessened by this immigration, it never occurs to them to protest. Everyone may hunt where he pleases. Only among the Aleut are family hunting territories said to occur, and the places where seal or fish nets are put are both in Alaska and in West Greenland considered family property, a fact which may be taken to confirm the assumption that nets were originally a non-Eskimo culture element. One essential reason for describing the Eskimo society as communistic is that the spoils of the chase do not exclusively belong to the hunter who secured them. Division is not equal, however, but proceeds according to very definite rules. These vary from place to place. In general small seals and caribou are not divided, although the fortunate hunter is obliged to give the others at his settlement a piece of meat as a present or invite them to his meal. Larger animals such as bearded seal, walrus and white whale are divided in a certain way between the hunter and those present during the flaying, but there are no particular shares allocated to relatives. Finally, the really large animals such as the right whale are true common property, everyone having a right to take what he needs; this last regulation is applied to all food during a famine.

The conceptions underlying property rights are very similar. Purely personal objects such as clothing, kayak, sledge, hunting weapons, etc., are personal property, and everybody who has traded with the Eskimos knows how closely this rule is observed; it would be inconceivable, for instance, for even a parent to sell any of his children's toys without first asking permission of the youthful owners. Things which are used for the benefit of several families - the communal houses, the stone weirs for salmon fishing and caribou hunting, etc. - belong to the society as a whole. Essentially the position is this: personal possession is conditioned by actual use of the property; a man who is not using his fox trap must allow another man to set it; in Greenland a man already owning a tent and an umiak could not inherit either of these objects, for it was taken for granted that no one could look after and use more than one of each kind. In this respect there has been a change in Alaska, where there does not seem to be any restriction on how much property an individual may possess. This change, which gives the owner of a big boat, umialik, a prominent position, and the accumulation of unproductive capital useful only as gifts at the great birth and death festivals, is quite un-Eskimo and can only have come from the North-west Coast of America, where society from southern Alaska to northern California has a distinctly plutocratic character. While thus among the Alaskan Eskimos the acquisition of wealth and the distribution of property both contribute to raising the owner's prestige, the Eskimos nevertheless have not grasped the fundamental principle of the Indian gift system, which is actually a means of acquiring added prestige by formal payment by members of one tribal moiety or clan to those of another group for duties rendered and, in consequence of the rivalry of the chiefs, often assuming the character of an interest-bearing investment by means of forced loans.

Property rights can be transferred to others, or, in other words, trading exists. The trading connexions of primitive peoples are often much more comprehensive than is generally thought, and among the Eskimos there was, before the advent of the trading posts undermined it, a considerable intercourse between the different groups. The extent of one man's geographic knowledge is revealed by the pencil sketch published by Hall from the Aivilik Eskimos, which showed the coast from Churchill River to Lancaster Sound, a stretch of nearly 1,000 miles as the crow flies! The East Greenlanders knew how to carve wooden 'maps' of their native place. The commodities bartered were those which were in constant demand, but of more or less restricted occurrence: the highly prized, spotted reindeer skins from Siberia; jade, which is only known from Alaska; soapstone, which is not found west of Coronation Gulf; telluric iron from the basalt area on the west coast of Greenland, etc., besides the more common products such as driftwood, seal thongs, baleen and, later on, European goods. In Alaska, invitations were sent out to great trading fairs, which took the form of luxurious festivals with ceremonies and drum dances. When the inland Eskimos in northern Alaska decided to celebrate one of these feasts, two youths were delegated some time in the autumn, carrying a rod decorated with eagle's feathers and red-painted rings which stated the number and names of the persons invited to come. As a rule everybody had friends in the other camps with whom he used to exchange gifts - and often also his wife - and with whom he vied in singing contests and all kinds of sport. When in the early winter there was sufficient snow, the guests arrived with their heavily loaded sleds, and at a distance from the camp they were received by youths who danced and offered them food. Then there was a veritable race to the camp between the guests and the hosts. Here a dance of welcome was performed outside the qalgi, where a stuffed eagle was placed on a long pole, because it was believed that the eagle had taught the Eskimos how to feast and make merry. Before they entered, some half-naked and poorly clothed men shot their arrows in order to frighten away all evil powers. Inside the house hosts and guests sat down with their drums on either side of a man with a wooden box drum. There was also a mechanical doll which greeted all the entering women. As soon as the introductory ceremonies were at an end, the hosts would dance, expressing their wishes, and afterwards came the turn of the guests. The dances were supposed to please the spirits. A considerable trade or rather gift exchange took place. Often the feasts would take weeks, and before the visitors left, all ceremonial objects had to be burnt. This Trading or Messenger Feast is probably the most widespread ceremony in Alaska, although the details differ according to the region. On the Pacific coast it seems to be unknown, however, and even though a somewhat similar feast occurred on the Aleutians, there is here no mention of gift exchange, but the principal purpose was to please the spirits and display the wealth of the chiefs, thus suggesting the well-known potlatch of the North-west Coast Indians.

The grand trading feasts are unknown among the Caribou Eskimos. On visiting journeys, on the other hand, the exchange of gifts is here a regular institution between persons who are known as iglorik 'cousins', even if they are not real relatives. One day at Eskimo Point a man, Tuktuitsoq, who was a 'cousin' to one of the inhabitants of the camp, Haumik, arrived from the south. At the feast of welcome, which was held in the evening in one of the big deer-skin tents, the dance was opened by one of the settlement's own inhabitants, that is to say, as the drum was not yet tuned, he merely stood still on the floor. Then Tuktuitsoq came forward. He did not actually beat the drum but just touched the skin lightly with the stick and, during his dance, he was given a rifle as a present, and this he then held in

his hand together with the drum. After this it was Haumik's turn, and then Tuktuitsoq danced as before, but this time he was given a woollen blanket. Haumik, who had remained on the floor, rubbed noses with him during the dance. The next evening there was dancing again, on which occasion Tuktuitsoq handed over his return gifts. When the gifts were presented the two 'cousins' usually shouted several times in turn tamalrutiga, 'you are everything to me' (lit.: my everything), to which the other answered hoi!

Good hunting places near the boundary between the different groups were the centres round which trade gathered. Barter Islands at the northern boundary between Alaska and Canada, the Akilineq ridge on the south side of Thelon River, Nunaingoq at Cape Chidley in Labrador, Taseralik Islands at the mouth of Nordre Strömfjord and Aluk at Cape Farewell in Greenland are common meeting-places of this kind in the Eskimo world. Stefánsson has estimated that an article of trade *could* pass from Bering Strait to Hudson Bay in two and a half years; in actual fact, however, as he himself admits, the progress would be much slower. Moreover, he is guilty of a gross exaggeration in regarding the Akilineq ridge as a kind of centre of all Eskimos. It has no connexion with the Greenland fable-land of the same name, as Stefánsson believes. It means simply a place on the other side of something else, e.g. a river or a fjord.

It is clear that violation of the right of possession can never cause much stir in the Eskimo society. Theft and robbery are practically unknown, for the small pilfering which goes on from strangers does not count in this connexion. Murder, witchcraft and - of course! - fights about women constitute the most frequent breaches of the peace. It is interesting to observe the attitude of the primitive society towards these; in essence it is not the mission of the society to execute law and justice, but exclusively to restore peace, using this word in the medieval sense of the ordinary, regular course of life. On this basis the settlement may, for instance, combine in killing a man or a woman suspected of witchcraft, for such persons are a menace to the peace of the society. The killing is not, however, a punishment for the practising of witchcraft, for the society may in the same manner get rid of a man with a wild and brutal temperament, or of old or sick people who are a burden upon the settlement.

The same desire to secure peace alone is revealed by the manner in which less serious quarrels are settled. In the Central regions this is done by means of a regular bout of fisticuffs, during which the adversaries take turns at showering blows upon each other's shoulders and temples. In Greenland and, it appears, in Alaska and on the Aleutians the disputing parties would assemble for the singing of lampoons in verse against one another, and abuse was certainly not spared. The aim was to ridicule the opponent at any cost, and a well-turned lampoon was capable of injuring a man's position for a long time. Among the Chugach a derisive song could be made by a man about his enemy. He would then sing it to him, and the opponent composed another song in return, but they did not sing before an audience in a regular singing combat. In such actions we find the same characteristic point of view: whether justice according to our ideas has been done or not is no concern of the society; the parties have given vent to their feelings and peace has been restored. Of course the weight of stultification and still more of common disapproval is hard to bear in communities so small as those of the Eskimos, and a person exposed to them will often prefer to settle elsewhere. If he does not, and provided his offence is considered serious, his camp-fellows may themselves leave the place, but they will probably as a rule do so as if it were casually or more or less stealthily in order not to hurt his feelings. Driving away of the culprit himself may occur, perhaps, but it is so inconsistent with the whole attitude of the Eskimos that it must certainly be quite exceptional.

One crime cannot, however, be smoothed over in the ordinary manner, and this is murder. It always requires blood vengeance. As we have already seen murder is by no means uncommon among the Eskimos in their aboriginal state. The high value put upon life and the feeling that one's own right ceases where that of others begins, is quite foreign to the Eskimo; but murder is not an expression of a crude depraved mind as with us, and many Eskimo murderers are in fact among the most skilful and energetic members of the society. The paradoxical position will occur that when a man has killed a rival in order to take his wife, he will as a loving stepfather bring up his victim's son who has some day to exact blood vengeance upon him! We may now justly question whether under the circumstances 'law' in our sense of the word does exist in Eskimo

society. According to Hoebel in his well-known work *The Law of Primitive Man* 'a social norm is legal if its neglect or infraction is regularly met, in threat or in fact, by the application of physical force by an individual or group possessing the socially recognized privilege of so acting'. Among the Eskimos the injured party not only has to take the matter in his own hands, but the sole authority to which he can appeal is public opinion. Even among the Chugach the chief, notwithstanding his distinguished position, was unable to exert any other coercion than moral pressure. The influence of public opinion, also in this tribe, is illustrated by the following incident. Once a habitual thief entered a house, and an old woman sitting there started to sing:

Anâlurshe
Anâlurshe
Makes me ashamed,
He was looking at me
When I was eating.
Anâlurshe
Anâlurshe.

He immediately left the house, but the children used to sing this song whenever they saw him. Thus he acquired the nickname Anâlurshe, i.e. Old Excrements, and after that he stopped stealing. It has been asserted that the shaman in case of an infringement of taboo is entitled to command penance, but this is due to a misunderstanding of Eskimo views. If by means of divination or by public confession he finds out that a breach of a taboo is the cause of some misfortune, and who the offender is, he points out what is to be done to reconcile the powers, but he has certainly no legal authority to carry his point. No doubt the culprit will, in 99 per cent. of the cases, comply with his advice, particularly if the shaman is a powerful personality, but the conclusive argument is again public opinion. It is here, as always, the latter on which social control really depends, and not on application of physical force in threat or in fact.

In some cases blood vengeance may grow into feuds between the settlements; this, however, has mostly been the case in Alaska and on the Aleutians, where contact with the North Pacific cultures has resulted in the adoption both of the advantages and the drawbacks of higher civilization. The settlements there were often placed in a position of defence by being built upon steep slopes with an open outlook, or on spits of land from which the inhabitants could flee in boats away from an approaching enemy. Armour made out of wooden slats or slabs of walrus ivory, obviously on an East Asiatic model, and arrows poisoned with the juice of aconite were used. The Aleuts and sometimes the Alaskan Eskimos set up on poles by their houses the heads of slain enemies. All Eskimos lived permanently in a state of war with the neighbouring Indians, and even the Greenlanders preserve the memory of these wars from the time when their forefathers lived on the American mainland. The hostile 'dog men' in the legends are known by exactly the same name which is used from Hudson Bay to Alaska for the Athapaskan tribes. There was no chivalry in these wars, which were merely a series of treacherous attacks and brutal massacres on both sides. But are we entitled to blame them? Even Achilles reproached Agamemnon that

... never with the people to go to war in plates of armour Or with the flower of the army to proceed to ambush Did your courage dare... (Iliad, I., 226 ff.)

If finally we look at the Eskimo society as a whole, we cannot but be struck by its primitive stamp. We see how it has grown almost unconsciously, like one of the poor plants of the Arctic soil. Here is no social tension to threaten its destruction, no cleavage between the individual and the whole, no cry for justice against a privileged brutality. Its ethic is one and universal, and its guiding lines are therefore followed with a certainty of which we do not know the equal in our own civilization. The Eskimo society remains apparently in balanced quiet. But its qualities must not be overrated. Its harmony is not built upon the foundation of a sense of justice. Its liberty is not the liberty of a conscious responsibility which draws a line between the rights of the individuals, and its equality is that of the undifferentiated horde, where personality and initiative are all too easily stifled.

Having briefly sketched the social organization of the Eskimos, we must now consider the life of the society as it unfolds itself to the individual from his birth to his death.

Birth in itself is an event full of danger and mystery, and for

both mother and child it may mean death. There are in consequence many precautionary rites associated with the entry of a child into this world. As a rule it must take place in a separate house or tent; although this was not absolutely necessary in East Greenland, all occupants of the house had to leave it and all furniture had to be taken out under the open sky. Two old women generally assisted as midwives; but there are places where the woman in labour must fight her hard battle alone. As among all primitive peoples, however, birth is astonishingly easy - doubly astonishing when one takes into consideration the fact that the pelvis of the Eskimo women is by comparison narrower than that of their European sisters. Delivery as a rule takes place in a kneeling position. For a whole month afterwards the mother is agdlertoq, taboo or 'unclean', and must stay in her own house or tent, refrain from eating certain foods, and from mentioning the animals of the chase by name. She may receive visitors, but may not go into the house of others. In the case of a miscarriage the rules are even more strict.

Certain customs must also be observed with regard to the new-born child. The navel cord, which must either be bitten or cut in two with a stone knife or a mussel shell, is kept as an amulet. When an Iglulik mother drinks, she must allow a drop to fall on the child's mouth, and when she eats, she must keep small pieces for it in a little bag, the contents of which are later sunk in a seal's breathing hole. If the child is a boy, she must move his arms as if he were paddling a kayak and let him 'harpoon' the pieces of meat with the meat fork. In Alaska, feasts are held at which presents are distributed to the guests.

The most important event, however, is the naming of the child. In Greenland it was said in former times that a newly born child cries because it wants a name. The name is regarded as a kind of extra soul, and when a person dies his name wanders about helplessly until it is given to a new child. By this means the child inherits the qualities of the deceased. Until the naming has been performed, no one will mention the name of the deceased person, but refer to him only by innuendoes and indefinite phrases. If the name is a common word in the language, it must be dropped, at any rate for a time, and it is this circumstance more than anything else that has given the East Greenland dialect its peculiar vocabulary. To this day there is

in Greenland – but strangely enough not among the Central and Pacific tribes – a certain shyness in mentioning even one's own name. If a man is asked his name, he prefers that someone else answers for him. It has gone so far that among Christian Eskimos the mother at a christening has answered the minister's question as to the child's name with an embarrassed 'naluvara' – I don't know! On Nunivak Island, Alaska, a child is often called after a living person, but as soon as it is grown up, its name will be avoided and a nickname, a slightly transformed kinship term, or a teknonymic designation (i.e. So and So's father or mother) will be used instead.

The children grow up in a free and unrestrained life. They almost always get their own way and are never punished, which perhaps has some connexion with the belief that through their names they are often in close association with dead relations. Nevertheless, they are on the whole more obedient than European children, although there are of course exceptions, especially between the ages of two and eight years: from the time when they are old enough to be naughty till they are big enough to be ashamed of it. The parents surround them with the deepest affection, give them the best pieces of food to eat, make toys for them and, in their games, teach them their coming work. As soon as they are old enough they begin to help in the house and on the hunt, and the day when a boy makes his first kill is one of feasting, demanding the observance of special customs in order to ensure good hunting for him in the future. A girl is considered to be grown up after her first menstruation. She is then for the first time agdlertoq, and later she must during this period always cook her own food in a separate cooking pot. Probably on account of North-west Coast Indian influence the puberty rites were more severe among the Pacific Eskimos than elsewhere. The girl was not allowed to leave her sleeping room for ten or twelve days, to eat fresh meat, blubber, or blue berries (the juice of which resembles blood), or to scratch her head. After this period an old woman took her down to the sea or to a small waterfall and made a fire. The girl had to bathe five times and after each bath run around the fire. On the Aleutians the puberty seclusion took forty days, during which the girl's joints (wrists, elbows, knees, etc.) were wound in thongs in order to protect both herself and the community against evil influences.

The existence of the Eskimos, rich though it be in outward excitement, and often involving a struggle between life and death, is yet inwardly monotonous and restricted. The long winter nights, the tedious days, often two or three at a stretch, when blizzard and storm imprison them in their houses, call for means of shortening the hours even more than do the light summer nights, when youth gathers at the common hunting grounds and there is warmth and abundant food. I have been in both winter and summer camps where night after night was spent at the drum dance until well into the early morning. Early accounts of West Greenland mention the round dance of the girls, but this sounds quite un-Eskimo and is presumably a relic of the medieval dances of the Norsemen, like those which are still preserved on the Faroe Islands. If we also disregard the religious masked dances, which will be dealt with later in another connexion, the Eskimo dance consists mainly of kneebending with the body leaning forward, with an occasional swinging from side to side, like an elephant behind the bars of his cage. Only rarely are the feet moved. In Alaska, on the other hand, the men's dancing is, according to Margaret Lantis, 'individually varied, full of mimicry, of vigorous joy in their contortions, stamping and leaping, and, on the part of the women, of graceful movement of the upper body'. In North Alaska wooden box drums and on the Pacific coast rattles of puffin beaks are used at festivals. The one instrument common to all Eskimos is the drum. This, actually a tambour with a handle at the side, the dancer holds in his hand, slowly rocking it from side to side on its own axis, and beating it with the drum-stick alternately on each side of the frame. The Pacific tribes and the Aleuts were the only Eskimos who placed the handle diagonally at the back, somewhat like Siberian and certain North American Indian drums. They also beat the head, not the hoop of the drum.

Slowly, then gradually quicker and quicker, sound the beats, and the movements of the dancer keep pace. He sings, and the women's chorus accompanies him high up in the treble scale. The drum booms with a hollow, mysterious sound, and its monotony batters on the nerves until they reach breaking point. Ever more wildly the dancer beats the edge of the drum till it would seem certain to break. His gaze grows distant; spaces open before him; herds of caribou in creaking snow;

mountains of meat . . . ! And the women's chorus continues undisturbed, with the everlasting refrain ajâ-jâ, ajâ-jâ-jâ . . .

Every man has his own song, which he alone has the right to sing. These songs are often difficult for outsiders to grasp, on account of their allusiveness; but in many cases they contain profound and impressive poetry. Listen to a West Greenlander singing in the old days (Knud Rasmussen's translation):

O warmth of summer sweeping o'er the land!
Not a breath of wind,
Not a cloud,
And among the mountains
The grazing caribou,
The dear caribou
In the blue distance!
O, how entrancing,
O, how joyful!
I lay me on the ground, sobbing . . .

Again, this anguished outburst at the close of 'a dead man's song, dreamed by one who is alive' among the Copper Eskimos (also in Knud Rasmussen's translation):

Tell me, was life so beautiful on earth?
Here I am filled with joy
Whene'er the dawn comes above the earth
And the great sun
Glides up into the sky.
But else I lie in fear and trembling
Of maggots and teeming vermin
That eat into the hollow of my collar bone
And bore out my eyes.
Aji, jai, jâ.

While the songs are certainly part of the unwritten 'literature' of the Eskimos, legends hold pride of place. With surprisingly few variations these tales are heard from East Greenland to the Bering Strait, preserving their ancestors' achievements and wisdom for later generations. In type they differ greatly from the legends of the neighbouring Indians, which characteristically describe a natural upheaval leading to the creation of some animal whose peculiarities are thereby explained. Among the Eskimos on the other hand animal fables are with few

exceptions merely short anecdotes, and man himself occupies the foreground in the more important legends which thus resemble those of certain Siberian peoples. Human achievement, as the Eskimos regard it, forms the core of their world of legend. In reality it very accurately reflects Eskimo life from the point of view of the Eskimos themselves. In their deeds the heroes always outdistance ordinary people, but they are human beings through and through, and in these legends there is no more witchcraft than may occur in the life of every great man.

A few of the stories are known in Europe and widely throughout the Old World; for example, the tale of the creation of fog (the magic flight), and of the man who married a wild goose (the goose maidens who bathed in the lake). Some of the animal fables are closely similar to those of the Indians, as for instance 'the whale and the giant gull', 'the dog who took a maiden to wife', and so on, and in the far west we find their legends strongly influenced by the raven myths which play such an overwhelming rôle among the North-west Coast Indians and the people of North-east Asia. But from the character of the majority of Eskimo legends we infer that they have probably been built to a great extent upon more or less historic events. In South Greenland there are several tales about the meeting of the Eskimos with the Norsemen in the Middle Ages. The Greenland 'dog men' are, as has been already mentioned, identical with the various Athapaskan tribes west of Hudson Bay, and the giant people, the tornit or tunit, seem to be an ancient Eskimo population from the same regions.

Besides dancing and story telling there are many other forms of recreation. Young people will vie in trials of strength and agility such as wrestling and hook-pulling with arms and fingers. Sometimes a whole camp or two neighbouring camps will arrange matches of football or (in Alaska) of shinny. There are numerous games both of skill and chance, and most Eskimos are inveterate gamblers. However, just as the tales told by the old people to their grandchildren have a serious background, since they are intended to instruct them in the lore and ethics of the tribe, so the games, too, are often more than mere play. Thus string figures are generally supposed to tangle the sun and are therefore made in the autumn to delay its disappearance, whereas ring-and-pin, a typical East Eskimo game aiming at catching a perforated seal humerus, hare skull

or the like on a pin to which it is fastened by a string, will hasten the sun and therefore belongs to the spring.

Disease is ascribed to witchcraft or loss of the soul. Therefore, when an Eskimo falls ill, he seeks the shaman; but, as Dalager says of old West Greenland, 'if the patient be a prominent and indispensable man, and the sickness mortal, no shaman dares to make the cure alone, but summons the whole faculty within the circumference of several miles'. The treatment is almost entirely magical, although among the Pacific Eskimos many plant drugs are known. The popular medicines to be found in Greenland nowadays are for the most part old, European household remedies and remnants of prescriptions which were used by the Danish physicians 100–200 years ago.

There are everywhere the most exact rules as to how the survivors are to conduct themselves when a death has occurred, in order to avoid the lurking dangers to which contact with the most frightful of all powers exposes them. As an example, we may cite some of the most important rules which, according to Knud Rasmussen, had at one time to be observed in East Greenland. Everybody had to take their possessions out of the house before the death; after it the house itself had to be cleaned and all those living in it had to wash their whole bodies. Only the closest relatives dared touch the dead and after the funeral they had to throw away their clothing and put on new. A man who had had to attend to a corpse had to remain at the rear of the platform fully clad, with even his hood turned up and his face averted, for three days. This is regarded, not without reason, as a veritable torment in the oppressive atmosphere of the house. Morning and evening he must bewail the deceased and at last undergo a series of purifying processes before he might resume his hunting life. A woman had to observe the same rules, and for the whole of the first year after the death she remained 'unclean'; she was forbidden to lift her eyes to the sky, to look over the sea, to mention the names of the animals of the hunt, to smile or speak above a whisper, or to eat a number of foods.

The corpse is wrapped up in skins. In the Central regions and in some parts outside that area the body is simply laid out on the tundra or in the hills, at the most with a ring of stones round it. Formerly closed stone cists were employed there, as

they are still farther east. In East Greenland the body of a man was laid on the beach where it was washed away by the waves, if any one of his forefathers had been drowned in a kayak. In Alaska the Indian platform burial is known, and, finally, the Aleut and the Pacific Eskimos sometimes buried their dead in a sitting position or placed them in crevices in the rocks after a primitive embalming effected by laying the body in running water and replacing the intestines with fragrant herbs.

The dead must be shown respect in other ways. In order that they may not be helpless in their new existence, weapons and implements are placed with them in the grave. That this conception is responsible for the custom of depositing grave goods is expressly asserted by the Eskimos themselves, and the theory of certain writers that it is done out of fear of the vengeance of the dead if the survivors should use his things is not confirmed by Eskimo statements at the present time. In Alaska great death feasts are held, and on these occasions gifts of furs and utensils are made in such huge quantities that they must be collected together years in advance. Until then the deceased must be content with a minor annual feast. Jacobsen has given a description of one of the great feasts at Norton Sound, and the gifts which were lowered down through the window in the roof of the festival house and distributed among the guests were no trifles. The ceremonies, the plutocratic stamp of which without doubt originates among the North-west Coast Indians, extend over a whole week and highly increase the prestige of the family, but their principal purpose is to pave the way for the departed to a happy existence and thus secure the hunting luck of the survivors. Therefore as many lamps are burning in the ceremonial house as there are souls to be honoured. Their namesakes, who act as their representatives during the rites, offer up frozen fish and fresh water and receive valuable fur clothes as gifts. At last the souls are called on to leave the village, and both hosts and guests purify themselves by taking a sweat bath.

CHAPTER VIII

View of Life

Religion, science and myths spring from the same source. They are man's attempts to find his place in the world, to the conditions of which he must, in a material sense, also adapt himself. Where certain knowledge ceases, mythology begins, but the transition is quite imperceptible. We differentiate between natural and supernatural so far as our knowledge of the laws of nature permits. To the Eskimo, however, the difference does not exist, for to him the 'supernatural' is in every way as normal as the everyday, tangible world in which he moves.

This attitude is of fundamental importance for the understanding of the primitive view of the world. Religious feelings are not foreign to the Eskimos, but they lay no claim to possess a revealed religion that has said once and for all the last word on the fundamental problems of human life. To them their view of life is nothing but a series of what they consider to be rational conclusions, built upon the experience of generations, and, at any rate in theory, they admit the relativity of these conclusions. It rests solely upon knowledge, real or imagined, and so far it is more related to the view of Einstein than to the credo quia absurdum of Tertullian; the difference from modern science being merely this, that the Eskimos have not been able to carry their conclusions to the same lengths and so unconsciously have filled up the gaps with the products of a 'prelogical' imagination. Thus experience and religious feeling combine in a primitive philosophy, defective and self-contradictory on, so to say, every point, but still in so far a coherent view of life that no room is left for strife between religion and reason.

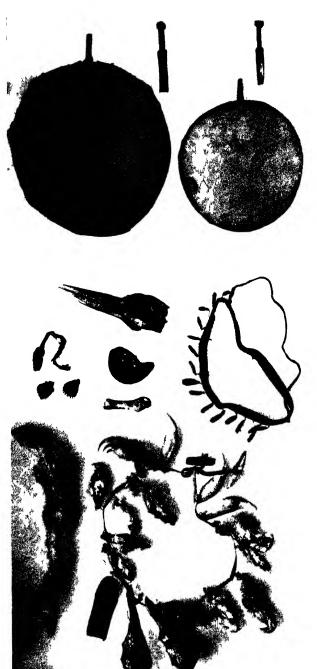
A word of warning is, however, necessary against reading too much into the expression Eskimo 'philosophy'. There are, of course, individuals who seek the truth as far as their abilities permit. We met such a man among the Caribou Eskimos – but



A young Netsilik shaman from Pelly Bay



Copper Eskimo dance. The dancer wears a loose hood surmounted by a loon's bill



Caribou Eskin

National Muse

Netsilik Amu Belt worn by a st girl in order to t her future child following quali Swan's beak (it be a boy) 1 teeth (he will be owl feet (powe fists) ptarmig in (good runner) head and trout cov (lucky fish Brow band cont ing a bee and grub worn b woman to give son a strong h Fimine s (strength and terity) Car front teeth an piece of caribou (luck when hui cambou) Heac great northern c (manly quali Piece of ice scoe a dead hunter (in scaling) 1 bone of a wolf runner)

Nati nal Ai

only in return for solemn promises of secrecy did he venture to unfold his extremely rationalistic and heterodox opinions. As a general rule, however, this is not the case. Independent thought is even rarer in these latitudes than in our own. A typical character trait which is linked up with this attitude is an almost unlimited faith in the word of their fellows; they will believe, and therefore they do believe. A Netsilik Eskimo once told me of a shaman who claimed to be so great that he could drive a harpoon right through his body without leaving the smallest mark. Any disbelief of the truth of such a narrative is met with complete incomprehension. Why doubt what the man said? Surely he knew best himself!

The idea of a creation is foreign to most Eskimos. They regard the world as a matter of course. The eastern tribes believe that the first men originated from hillocks, but one of them, who was a mighty shaman, transformed himself into a woman and thus became the ancestress of mankind. According to the Eskimos of northern Alaska the Great Raven was the first living being. He was sitting in darkness on the ground when he became conscious of himself, after which he planted the trees and created the human race.

The Eskimos know in great detail the conditions of their native land; but of the regions more remote their ideas are vague and fantastic. And even in the country where they are familiar with every lake and hill-top, there live beings who are only exceptionally seen by man: the people of the skerries, who sometimes help people, but at other times carry them off to torture and imprisonment; the eye goblins with eyes winking lengthwise, whom it is dangerous for lonely wanderers to meet; dwarfs and giants, glutton trolls, shadow-people, etc. These are beings fearsome in appearance and skilled in sorcery. They may be the helpers of the shamans, but however strange their powers they are not in themselves of other nature than men and animals. Below the visible world is the underworld, where it is warm and comfortable; there many people go after death to continue life under conditions similar to those enjoyed when alive. Others go to the skies, which is considered by some tribes to be a good place though the West Greenlanders believed it to be cold and deserted. When the dead there play ball with a walrus head, the Northern Lights appear. The Netsilik Eskimos also know a third land of the dead, 'the land of the crest-fallen', just below the

crust of the earth. Unskilful hunters and women whose tattooing has been badly done sit there, chin on breast, now and then snapping dully after the butterflies which are their only food.

If we try to penetrate to the core of Eskimo belief, we shall find that the fundamental ideas can be traced back, partly to their own psychological assumptions concerning the apprehension of the phenomena observed, and partly to these phenomena themselves. The latter again fall into three different groups, viz., the observer's own mind, the exterior surroundings as they are normally, and those surroundings as they appear to him in particularly striking, unexpected or fearful form. To these correspond different sets of ideas, which it is true overlap one another and are in part self-contradictory; but the logical defect in the train of thought is not clear to the Eskimo.

The psychological assumptions are deeply influenced by the 'pre-logical' or 'mystic' attitude of their mind. Wonder, fear, and the feeling of personal impotence against all the over-whelming surrounding powers, are the most profound feelings in the religion of primitive man. Even these are not very strongly expressed in the earliest stages of culture. We must take it that at first man simply took the world for granted without expending much thought on it, and therefore we must take into consideration the fact that unconscious thought, whose rôle is gradually appearing with greater and greater distinctness, has been of extremely great importance in religion, as it has in social and linguistic phenomena.

This can be clearly seen when we look at what may be called the contribution to religion of the outer world in its normal aspect. How does one unconsciously, 'instinctively', regard one's surroundings? The whole world is reflected in the picture of the observer. The child who strikes the chair against which it has stumbled, does so without metaphysical speculation as to whether it has a soul, but solely from the thought that the child himself lives, and therefore everything else must live. It is the same with the Eskimos. Every object, every rock, every animal, indeed even conceptions such as sleep and food, are living. Everything has its living 'owner'. Significantly enough, the very word *inuk*, which, as previously stated, means person, is used in the possessive form *inua* (plural *inue*), 'its owner'. The whole world is just living, as man is, and the *inue* are, indeed,

thought of as possessing human shapes. Therefore it is a very common trait in the legends that a person visits strange people who afterwards turn out to be animals in human guise. The Alaskan dancing masks often show a combination of an animal shape and a human face representing the *inua*. The *inua* are manifestations of the vitality of nature herself; they are the result of man's unconscious projection of himself into normal nature, but they are very different from the soul. A large stone, a whirlpool in the water, have each their *inua*, but no soul.

But the Eskimos have also a strongly developed belief in the soul. This brings us to the second factor in the development of religion, man himself. From his own ego, through dreams and hallucinations, he draws the conclusion of the existence of the soul. Man and the animals have a soul. In most eastern tribes it is known as tarneg, a word related to the word for shadow or reflexion. The Chugach call it shugunra, but assert that it is the same as a person's anerineg or breath. The Caribou Eskimos use the term tarney, but nevertheless identify it with 'the seat of breathing' and 'vitality.' In West Greenland, if a man's soul was stolen and he fell sick, it might be replaced by an animal's soul. The soul of man looks like a man, that of the caribou like a caribou, and so on, but on a greatly reduced scale. The East Greenland Eskimos believe that every person has several souls: one lives in the throat and one in the groin, and they are each about as big as young sparrows. The name is also a kind of soul. It stays with a person when he dies, but leaves him when a child is named after him; for a moment the dead person will then feel cold and ill at ease, but recovers soon afterwards. Thus the child inherits the dead namesake's qualities, or it may even be considered to be the reborn person itself. If among the Caribou Eskimos a boy acquires the name of his father's mother, his own father will address him as mother, and his brothers and sisters as grandmother. Only among the Eskimos of southern Alaska does the idea of re-incarnation in connexion with naming seem to be unknown. On the other hand the belief in re-incarnation of the animals is widespread in Alaska. If among the Chugach the head of a bear is left on the spot where it is killed, with the nose turned inland, the bear soul will return to the mountains and take flesh as a new bear. The fish soul is supposed to live in the intestines, for which reason these are thrown back into the water; if they are washed ashore again,

the fish soul will die. All the complicated system of taboo and a great part of the Alaskan Eskimos' festivals, to be described later, are intended to show the necessary respect to the animal souls in order that when they are reborn, they may not keep away from man and revenge themselves upon him.

Finally, there is a third great factor in the genesis of Eskimo religion: the unusual, the mysterious. Why does the unforeseen happen? What lies behind the event? Here, too, the Eskimo has his explanation. Everything outside the everyday is caused by a special power, an impersonal force, which permeates existence. This force is called *sila*. The word is almost impossible to translate, because it expresses something which is to us quite foreign. It may mean the universe, the weather or the intelligence. In itself *sila* is neither good nor evil, but it is extremely dangerous to the person who does not understand how to deal with it. In this it resembles electricity, as has aptly been said of *mana*, the corresponding power among the Polynesians.

This force, however, like everything else, is also sometimes personified in an inua, Silap-inua, known south of the Yukon as Slam-jua, and among the Pacific Eskimos as Tlam-shua, or simply Pinga, 'he (or she) up there'. This conception extends from Greenland right to Alaska and the Aleutian Islands. Slamjua, said a shaman from Nunivak Island to Knud Rasmussen, is so indescribably mighty that his speech is not heard in ordinary words, but 'through gales, snowfall, rain shower, the disturbance of the sea - through all the forces feared by man'. But it is also so mighty that it will announce its presence through the most innocent of vehicles, a little child. 'The children hear a fine and indulgent voice, almost like a woman's. It speaks to them in a mysterious manner, but so kindly that they do not become afraid; they merely hear that a danger threatens. The children relate it casually when they come home, and it is then the task of the shaman to take what measures he can to avert a threatening castrophe.'

Besides the general conceptions of *inua*, soul and *sila*, there exist also more strongly personified figures in the sphere of Eskimo ideas. In some cases, e.g. the man in the moon, they are merely an extension of the *inua* idea; in others they come from outside, as, for instance, the raven; but often they are merely mythological figures, which in themselves have nothing to do with religion.

There are, however, two or three that constitute an exception, and a very important exception, to this rule. In the sea the coast Eskimos encounter a force which affects their daily labour to a far greater extent than the vague and remote Silap-inua. The sea is the chief source of food, and on the sea bottom lives the woman who governs the animals of the sea and whose anger is. therefore, to be feared more than anything else. The Central tribes know her as Nuliajuk, 'the dear wife', or Sedna, 'she down there'. In West Greenland her name was Arnarquagssâq, 'the old (or, according to Thalbitzer, the 'majestic', 'glorious') woman'; and in East Greenland Imap-ukûa, 'mother of the sea'. But the figure is everywhere the same. The sins of man settle like dirt in her hair, and properly indignant she keeps the animals of the sea away from the land. The shaman must then perform the dangerous journey to the bottom of the ocean to cleanse her and soften her feelings towards the starving settlements. Among the Central tribes she occupies the highest seat among the spirits, and festivals are held at which the shamans 'harpoon' her and try to persuade her to give good hunting. Among the Pacific Eskimos she has a counterpart called Nunam-shua, the owner of the land, who is supposed to be a woman living in the mountain forests and governing the land animals. One of my informants at Prince William Sound claimed to have met her three times and described her as dressed in a fur coat with all kinds of miniature animals and beaming with a dazzling light.

No less than the 'woman down there' did the Greenlanders and the Bering Strait Eskimos fear the man in the moon. In every part of the Eskimo world the moon is a male figure, whose sister is the sun. In Greenland he was supposed to keep a special watch upon man and punish his disobedience, while at Bering Strait, where the woman of the sea has almost disappeared from religion, it is he who rules the animals.

Finally, in Alaska the raven plays a great part both as the creator of mankind and a trickster of rather doubtful morals; but this figure is certainly not Eskimo in origin. Among the peoples on both sides of the northern Pacific – Chukchi, Koryak, Tlingit, etc. – the raven is the central figure of mythology, and the Eskimos appear to have derived their raven myths from these tribes. The Asiatic Eskimos attribute certain supernatural qualities to the killer whale; it is believed to protect the hunters,

but in the winter it changes into a wolf which attacks the herds of miserly reindeer owners.

Livy says of King Tullus that he was a very pious man; but when he inadvertently performed some holy ceremonies incorrectly, he was nevertheless struck down by the lightning of Jupiter. Eskimo religion is in some respects on a higher plane than this quite unethical view of the gods. In their view, too, punishment follows in the path of the deed; but if sin is publicly confessed, it is thereby atoned for. There remains, however, much to beware of. Man's littleness and powerlessness is the deep, fundamental note in the religion of the Eskimos, resounding throughout the whole struggle man makes to avoid evil. From this attitude arise all those apparently absurd rules and taboo regulations, which are strictly observed. It is essential not to offend 'the powers', not to disturb the balance so that sila will retaliate. Children, of course, have but little resistance against evil, and consequently there are many things they must not eat; but the women also come into dangerous propinquity through menstruation and childbirth; and finally there is death, which more than anything else requires exact observance of complicated and difficult rules. Examples of these various prohibitions were given in the previous chapter (p. 153 f. and p. 158 f.).

Related to these observances are all the rules which are not concerned with 'the powers' in general, but have a very special purpose: to conciliate the souls of the game. 'Life's greatest danger' - said an old Iglulik shaman - 'lies in the fact that man's food consists entirely of souls.' By this he meant that man must kill in order to live, and thus exposes himself to the anger of the animal soul if it is not treated with proper respect. The ringed seal is a peaceful animal in death and in life, nevertheless the hunter's wife must take precautions against its anger and pour water on its snout when it is killed, for seals live in salt water and therefore suffer from thirst; furthermore, during the first night after the kill the harpoon must stand by the blubber lamp, so that the soul, which is still in the harpoon head, may warm itself at its flame. Bearded seals and bears require that no work be done for three days after a kill, and presents must be hung up for the slaughtered bear. A present of sole skin is good, for bears walk so much! The inland tribes of northern Alaska treat the body of the brown bear with great respect, and its meat is taboo to women and children. Every autumn after a whole month of preparation the Bering Sea Eskimos hold a solemn festival for the bearded seal, which ends by the sinking, through a hole in the ice, of the bladders of all the bearded seals caught during the past year, while the shaman prays for good hunting in the year to come.

The greatest ceremonial display is, however, associated with whaling. At Hudson Bay it was comparatively simple; after the kill the men and old women collected in an open space with stones set in circles and ate a meal of whale meat, which might be cooked only over blubber or bones covered with train oil. All work was then suspended for three days. In the Bering Sea region, however, the ceremonial was much more elaborate. Here the idea of honouring the animals of the sea reaches its climax and culminates in mimic mask dances which involve the use of mechanical figures and the distribution of gifts, such as it had been taught to man by the animals' inue in the distant past. These ceremonies ensure the good-will of the animals and an abundance of food throughout the year and thus portray a belief in the need for supporting the regular order of the world which is quite foreign to the eastern tribes. The following description, quoted from Knud Rasmussen, affords an idea of the form taken by these great religious festivals. Clad in new clothing, with the sacred brow band of white skin, ornamented with the picture of the whale, those participating in the festival gather in the dance house, qalge, which for this occasion is painted inside like the sky with its stars and furnished with skilfully made mechanical dolls. In ordered succession special spirit lays are sung or mumbled, until suddenly a man with a feathered wooden ring in his mouth jumps forward and begins to dance.

'For a moment he attracts attention to his queer movements, until he is quite forgotten amid all the wonderful things that now happen. All the dolls in the festival house come alive. You are in a spirit house, you laugh, you cry, shout with joy, in fear – all at the same time – and an incomprehensible and violent feeling seizes everyone. The bird under the roof flaps its wings and beats its drums, ringing, booming, rhythmically. The downy toy top is set going with

a cord of plaited sinew, and all the down flies out of the holes and floats about the room like little, living birds; only the eagle's down in the top remains like a glimmering banner that spreads out with its buzzing speed. Then the crew of the skin boat joins in. All the little men, who are dressed for bad weather and a long journey, vigorously wield their paddles backwards and forwards, to and fro, whilst the steering oar of the helmsman sets the course. There is movement, there is life about them, and the gut skin frocks rustle at their breasts from the pressure of their quick breathing. At the entrance of the house stands the man with no lower body; he waves to the guests and nods to all the women, he throws out his arms as if he owned everything, and nods his head to everybody.

And still the most remarkable thing is to come; the marten emerges. No one has seen it before, no one has noticed it, but now it puts its head forward out of its dwelling, its den, withdraws it again quickly, then shows it again. It hesitates for but a moment, then springs forward and runs along the string to its other dwelling on the opposite wall. No one doubts that it is alive – its legs galloped as if springing through the air – no one sees the thin cord it follows. It disappears into the other dwelling, comes out again and once more runs across the room; but midway across it seizes the bladder that hangs on the cord with a rattle below it, snaps it up and gallops with the noisy bladder over to the den. All hold their breath, for they know that if it does not succeed in getting the bladder inside with it, one of those present in the festival house will die before the year is over. . . . '

Besides these regulations and ceremonies, each of which is special to its own animal, there are among the Central Eskimos a considerable number of regulations intended to prevent the merging of activities concerning land animals and those concerning animals from the sea. As Knud Rasmussen points out, it is as if these tribes have only in comparatively recent times come in contact with the sea and have there met something strange, of which they must beware. Not only is it strictly forbidden to eat, for instance, walrus and caribou meat on the same day; but before seal hunting on the ice begins, all weapons must be smoked over a fire of seaweed in order to 'take the

smell of the land from them', and at the same time all sewing of deer skins must stop. The caribou is very sensitive to women, who must therefore do no sewing as long as the summer caribou hunting lasts, that is while they live in tents. The result is that there is often difficulty in getting the new clothing finished in time for the winter.

The amulets worn by the Eskimos are also a safeguard against evil. In itself the term amulet is somewhat misleading; for a genuine amulet - a lucky coin, for instance - exerts its magical effect by its presence alone. The so-called amulets of the Eskimos are rather fetishes, for they are effective by virtue of a mystic alliance between the wearer and the power that they symbolize. Thus one may quite well lose the amulet itself and yet retain its power. On the other hand, it is no totem, not even a so-called individual totem; for the same person will as a rule possess many amulets at the same time, as did for instance the sevenyear-old Netsilik boy whose frock, hung with eighty different amulets, is now in the Danish National Museum. Furthermore, in many cases it is the power of a particular object and not, as with the totem, any object of the particular class, which has the protecting effect. And yet it can be seen that in the belief in amulets there lies something like the germ of a totemism, and in this direction there is among the Bering Sea Eskimos a further development. Their principal objective is to have as many amulets of different kinds as possible in the settlement; too many of the same kind, they say, would split the power. Thus they appear to a certain extent to entertain the notion of the particular object as representative of a class. As has already been stated, people with the same amulet must not marry, but this can scarcely be called totemism (cf. p. 141). At Point Hope there are two kinds of amulets, one which is derived from dead persons' property and another which is activated by contact with the belongings of 'unclean' women. The possessions of a deceased person cause bad luck to people with amulets of the latter kind and vice versa. This danger can, however, be avoided in a very ingenious way. The parents decide to which kind the amulets of their new-born child shall belong, after which it receives them from some older person for whom it is named. As soon as the decision is made, but before the child has received the amulets, the mother will eat something that is taboo for the group in question, and this is considered a kind of 'vaccine' that makes the child immune from the dangers which otherwise threaten the members of the group.

Amulets are of the most varied kind and express both a grotesque imagination and an association of ideas. Owl claws give strong fists, caribou ears make the wearer quick of hearing on the hunt, a thick willow branch gives growing power and lamp soot strength – 'for soot is stronger than fire' – a fish skin kept in the tool box gives luck when fishing, and the skin of a loon in the kayak gives speed. Among the Netsilik Eskimos most of the amulets worn by girls relate to the sons they expect to bear some day; for their own account they have to be content with, for instance, the side line of a salmon, which resembles a seam and therefore makes them good seamstresses.

On special occasions, as when in danger during the hunt, spells are used. They are regarded as secret and highly valuable knowledge which a man bestows only upon his children. A West Greenlander once confided to me the following words, which are an aid for catching game:

Why am I no longer able?
Why cannot I now make a kill?
What prevents me? – what prevents me?
Hither, thou my quarry!
Hither, thou my quarry!

Ajâ ajâ!

An early writer mentions no fewer than twenty-five different kinds of spells from West Greenland. The words are archaic, and the sentences often incomprehensible or meaningless, but it is on this very fact that their mystic power depends. They are not prayers addressed to any particular deity; the happy result is due to the power of the wish itself and the manner in which it is expressed.

On the whole the Eskimos endeavour more to exercise a magical control over nature and the 'supernatural' than to seek the favour of the powers. And yet sacrifices are not entirely unknown. When passing places where there are dangerous current holes or ice fjords, the *inue* of these localities should be given an offering, though it be a mere trifle, a piece of blubber or the like. In remote parts of West Greenland one might a few years ago still see the boat crew, half embarrassed and half in fun, yield this tribute. On Sentry Island, a small island off

the west coast of Hudson Bay, where some of the Caribou Eskimos live in tents every summer when hunting aquatic mammals, there is a large erratic boulder hung all round with presents intended to give good hunting, and in the festival houses of Alaska there are carved wooden figures to which offerings are made.

There are, however, occasions when neither taboo nor amulet, spell nor offering is sufficient, and when it is necessary to resort to a man or, more rarely, a woman who is in special communication with the supernatural. This is the shaman, known as angákog in the east, and tônralik or katlâlik, 'he who has familiar spirits', in Alaska. He bears within himself a sort of shining fire, so that he can see in the dark in both a literal and figurative sense. He can fight against hostile spirits, and he can find out who has violated a rule and make the culprit confess, which, as previously mentioned, is the same as atoning for it. He is a benefactor to the community and must not be confused with the sorcerer, ilisitsog, who in secret tries to conjure death and disaster for his enemies. The shamans do not constitute a separate social class. They live and hunt exactly like any other member of the community even if they are paid when their assistance is entreated, and they dress like ordinary people do. Only among the Central tribes will they fasten strips of caribou skin and small bone carvings of human figures, harpoons, knives, etc., to their belts. All these are gifts, 'for presents give strength', and the donors are confident that the spirit helpers will recognize them by their gifts and therefore will never do them any harm. The shamans are respected and may even be feared, but their authority depends wholly on their own personality. I have known some who were in really high esteem and others - inefficient hunters and poor devils on the whole - who were met with a shrug of the shoulders and a halfindulgent smile by their own camp-fellows.

An Eskimo almost never becomes a shaman of his own free will; it is sila or the spirits themselves who, through dreams or some other manner, appoint the chosen one. Among the Eskimos there does not seem to be any sexual basis for this choice, such as Sternberg has discovered among the Siberian shamans. Behind the apparent selection of the spirits lies, of course, the fact that the shaman-to-be must be susceptible to influences by which he may be entranced. During his ecstasy the

soul leaves his body, and often a spirit takes a temporary abode in it. The drum is one of his most effective aids, though it is not the highly developed element that it is in Siberia. The shamans are often pronounced neurasthenics or epileptics. Their training proceeds under the guidance of an old shaman; but the main requirement for its success is solitude. Remote from other men, fasting and cold, or engaged in some nerve-racking task – as in Greenland where he had to incessantly rub a small stone round about a large one – the pupil awaits the spirits which exhaustion and delirium at last delude him into seeing. I have, however, been told of cases where persons became shamans without training, even without knowing it themselves, till they discovered it by some accident.

The spirits then become his future helpers. Such a tôrnag or familiar spirit does not belong to a special class of spirits as supposed by Weyer, whose attempt to identify the familiar spirits (tôrnat) with a half-legendary tribe of the Central regions (tunit, see p. 157) is impossible from an etymological, if from no other point of view. A tôrnag may be one of nature's inue, the soul of a departed person or animal or the like. In Greenland, and possibly also at Bering Strait, the shaman always had a tôrnârssuk, 'the special familiar spirit', which through a complete misunderstanding by the first missionaries was taken to be the Eskimos' highest godhead. Actually every shaman had his own tôrnârssuk, a sea spirit, who helped him on the way to the Mother of the Sea Animals. Among the usual familiar spirits of the East Greenlanders there figure an oracle spirit who answers questions, 'the giant falcon' and also 'the crooked mouthed from the outer skerries', who is enormously strong and helps the shaman when the angry man in the moon threatens vengeance. In a few cases masks are also used. It is thought that special spirits connected with them take up their abode in the wearer when they are used. In Greenland, however, masks have almost no religious meaning, and are of but slight significance among the Central tribes. In Alaska they are encountered in great variety and grotesque elaboration and occupy a position of central importance at the great dance feasts, which are intended to express the experiences of the shaman in the land of the spirits.

Shamanism is found in its simplest form among the inland dwellers on the Barren Grounds; here as a rule the shaman retires into solitude where Silap-inua can notice him, and there

he walks and walks, exhausted and fasting, in every kind of weather, thinking only of the matter in hand until his familiar spirit gives him an answer. Another form, which I witnessed among these Eskimos by the great lake Hikoligjuaq, was enacted as follows:

Towards evening practically the whole population of the camp gathered in the large deer-skin tent which belonged to my host and 'adoptive father', the shaman and wholesale murderer Igjugârjuk. In accordance with the usual practice they began with song; for before the mystic rite can begin the minds of the company must be tuned to a festive mood. One by one the singers stepped forward. Like a silhouette each figure outlined itself against the entrance, through which the twilight of the Arctic spring stole in and picked out those sitting nearest, whilst the remainder of the tent lay in a semi-darkness charged with suspense.

At last came Igjugârjuk's turn. Each person had to press his hand, the women with the left, the men with the right hand. Even the sleeping children were roused and drowsily stretched out their little fists. Before him he placed one of his mittens, then wound his belt tightly round the point of his shaman's wand, a stick of wood, about half a yard long, 'brought from far away'. Now he touched the mitten with the wand, moving it slowly up and down, up and down. . . . Soon it seemed as if an invisible force was holding down the wand. With greater and ever greater difficulty he raised it, the orbit described becoming shorter and shorter, and the sweat stood out on his brow in great beads. Finally, despite all his efforts, he seemed quite unable to raise the wand from the ground. The miracle had happened! There, just below us, down in the ground, was his familiar spirit answering the questions, yes or no, according to whether the wand could be lifted or not.

In the meantime the general conversation had died away. Only now and then was the stillness broken by a subdued call to the spirit: atê, atê! The atmosphere of uncertainty and tension was oppressive. The performance was repeated several times, until Igjugârjuk had interpreted the answers and announced the result. His voice was breathless and strained; there was no doubt that he himself firmly believed. Then when we had again shaken hands with him, this time with the hands crossed, the singing was resumed for a short time and the proceedings

concluded with everybody drinking tea. In the meantime the brief night had come to an end, and when at last we lay down to rest the sun was about to rise over the low ridges in the north-east, and Hikoligjuaq's field of ice lay before us reflecting delicate tones of rose against a background of fantastic, violet banks of cloud.

The kind of divination described here is to be found in varied forms, such as head lifting, among most tribes. In Alaska and Greenland, however, the shaman attached much more importance to tricks, conjuring performances and ventriloquism, for the purpose of impressing the audience. A classic example is the following description by Holm of one of these ceremonies at Angmagssalik, which he witnessed when he wintered there in 1883-4.

'... Then followed noise and tumult of every kind: rattling, swishing, flapping sounds, now as of a workshop, now as of locomotives, and then as of large, flying beings. To the accompaniment of the most terrific noise both platform and window-frame shook. Sometimes one heard the shaman, at the mercy of some great overpowering force groaning, wailing, shrieking, whining, whispering; at others one heard spirits, some of which had coarse, others tiny, others lisping or shrill voices. Often we heard demoniac grating and mocking laughter. The voices sounded from above, from under the ground, now at one end of the house and now at the other, then outside the house or in the entrance passage. Cries of 'hoi! hoi! hoi!' died away as if in the most distant abyss. The drum was used with wonderful skill, often moving round the house, and especially hovering over my head. Song often accompanied the drum, sometimes low and subdued as if it came from the underworld. Sweet female singing was sometimes heard from the background. After a deafening, flapping, rattling and swishing noise everything suddenly became quiet, and in came the terrible monster, Amôrtoq. It had black arms, and whoever is touched by it turns black and dies.1 It went about the house with heavy steps and up on the platform, and roared 'a-mô!' Everybody fled to the furthermost corners of the platform for fear that the monster should happen to touch them. . . . '

¹ This description better applies to another of the spirits of the East Greenlanders, *djumâq*. (K. B.-S.)

Even in cases such as this one must be cautious about speaking of wilful fraud; in ecstasy the shamans can undoubtedly do a great deal that is not even clear to them, and there are trustworthy examples of some having allowed themselves to be hanged or burnt alive, trusting to their supernatural powers.

CHAPTER IX

Origin and Development of the Eskimo Culture

THE great German geographer and ethnologist Ratzel has said that the root of a culture never goes straight down like a tap-root but branches out to all sides. It is also an old truth, which we need not go into here, that relationship in race does not imply relationship in either language or culture, any more than the same mode of living necessarily involves a similarity in language and physical character. A term such as the origin of the Eskimos is therefore ambiguous and, if it is to be used at all, we must first of all be clear as to whether it refers to their purely physical descent, to the development of their language, or to the origin and history of their culture.

The problem of the affinities of the Eskimo race-type has already been discussed and the conclusion drawn that it involves not only our conception of the peopling of America as a whole but also fundamental problems in biology, for the soultion of which we must for the present wait.

Until recently physical anthropology gave us no hint concerning the habitat of the Eskimo race prior to its occurrence in the American Arctic. G. F. Debets has shown, however, that a racial component corresponding to the Eskimo type is found among the Chukchi and Koryak and probably also among the Itelmen (Kamchadal), and the old idea of an 'Eskimo wedge' separating these Palaeo-Asiatics from the American Indians must thus be abandoned.¹ Even more striking is Shapiro's and Carl C. Seltzer's demonstration of a very conspicuous similarity in race between the Eskimos and the Chipewyan and Cree. It is true that Collins ascribes this agreement to European

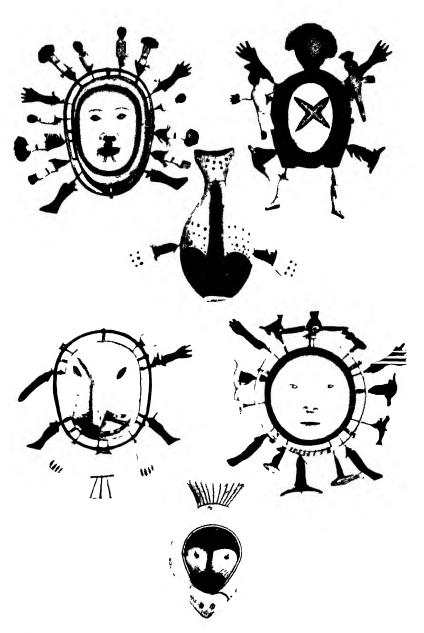
¹ It may here be added that Debets, in a paper read at the 5th International Congress of Anthropological and Ethnological Sciences in Philadelphia 1956, emphasized the identity in shape of the skull of the present-day Yukagir and those belonging to the Palaco-Eskimo Ipiutaq period to be discussed below.

Caribou Eskimo boy with amulets fastened to the back of his jacket





The 'Holy Stone' on Sentry Island off the west coast of Hudson Bay. Tobacco, bakingpowder, knives, files, etc., are sacrificed to ensure luck in sealing



Masks from Nunivak Island, Bering Sca. They are supposed to represent the assistant spirits who take up their abode in the shaman when the masks are used

Vational Museum, Copenhagen

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admixture. He even writes that my photographs 'leave no doubt of the considerable amount of white [sic!] blood present among the Caribou Eskimos', although it seems rather puzzling how it should have been introduced. At the time of my stay among them, very few travellers had visited their country, the two or three Hudson's Bay posts had been established only a few years before, and many women and children had never seen a white man. On the contrary, it does not seem impossible that an Eskimo-like element has survived in the Athabaska and Great Slave Lake region. We shall see that cultural evidence may point in the same direction.

Whether the Esk-Aleutian linguistic stock is distantly related to any other - if so probably the Uralian (and Yukagir?) - is a moot problem previously referred to, and a question which cannot be answered definitely for the present. There is no doubt that within the stock the Aleut language occupies the most aberrant position. On the basis of his so-called glottochronological method, which, to be sure, has met with a great deal of scepticism, Swadesh has opined that the first breaking up into an Aleut and an Eskimo language took place some 4000 years ago, whereas the separation between the Yupik and Inupik groups did not occur till the first part of our era. On the whole the Yupik dialects are, perhaps, at an earlier stage of linguistic development. In itself this does not prove that the original home of the Eskimo language is to be looked for in Alaska, but on the other hand the fact that the greatest linguistic diversity is found in that area is a sure indication in this direction. Another interesting point is that Rink's comparative studies of the vocabulary have shown that wherever the speakers of the primitive Eskimo language first came into contact with the sca, it was within a fairly limited region. This then leads to the question of the origin of the culture

In this we are on somewhat safer ground, even if innumerable problems remain to be solved. First, however, we must explain what is meant by the origin of Eskimo culture. A culture is constantly being transformed by development and decay, and in a sense it is also without any beginning if it is not traced back to its very source at the emergence of mankind. If, however, the problem is to be kept within reasonable bounds, we must define the origin of a culture (1) not as the origin of its separate elements, but of their synthesis; and (2) not any

synthesis of these elements, but as the formation of that particular complex which distinguishes it from other patterns of culture. As regards Eskimo culture, this means its adaptation to the sea, and as Rink has already expressed it, its cradle stood at the spot where this adaptation took place.

There was a time when it was thought that every culture was autochthonous and had developed in its own special conditions, almost without influence from the outside. We know now how incorrect this view is. Every vigorous culture has a certain tendency to expand, its elements spreading from their place of origin as though they were species of animals or plants. In the absence of historical evidence the principal difficulty is to decide whether a given culture element is of local origin or has been derived from outside. This may sometimes be very easy. The design of a man's head above a galloping horse on the gold bracteates of the Germanic (post-Roman) period of the Danish Iron Age is in itself a representation without meaning and can only be explained by regarding it as the barbarians' imitation of the gold solidi of the Roman Empire with their equestrian images. In a similar manner slavery and the accumulation of wealth among the Alaska Eskimos are manifestly the result of the introduction of elements which have no roots in Eskimo life, for of what use are slaves and capital in this society? An element that does not harmonize with the cultural pattern must be foreign; but this dictum cannot be reversed: an element borrowed from outside may in the course of time so fit itself into the pattern that it cannot for intrinsic reasons be separated from the cultural whole.

This is a point of the greatest importance. For instance, when we find that in Africa iron is smelted and forged in the same manner from Morocco to the Cape, it would be absurd to assume a long series of inventions mutually independent of each other. Even if there is not, as in this case, an uninterrupted distribution, but in fact a sporadic one, there is often no reason for doubting the connexion between the elements. As a rule a distribution occurrence of this kind will prove to be characteristic of the culture elements of early times; they are in ethnology what relics are in biology, the surviving remnants of ancient culture strata which have in some places been able to hold their own, but elsewhere have for the most part perished.

Sometimes several elements belong to an inseparable whole

and are carried as a unit from tribe to tribe, because none of them can easily stand alone. We shall see an example of this in Eskimo whaling which with its accessories, from skin boat to taboo rules, seems to form a group of this kind, a culture complex. On the other hand, the Vienna school of ethnology has formerly in many cases exceeded reasonable limits in its assumption of the unbreakable solidarity of such complexes. It is not difficult to discern the weakness of this view if we turn to ethnology's elder sister-science, archaeology. The latter end of the Danish Stone Age is, for instance, in several respects 'a disguised Bronze Age', i.e. several elements, which in the Mediterranean area belonged to the metal era, found their way to the North before the metal itself and were sometimes imitated in flint (e.g. the daggers), while conversely, the making of flint tools for everyday use continued throughout the most of the Bronze Age proper.

The reason why individual elements often spread alone instead of in associated groups is quite simple. As F. C. Bartlett points out in his important study, Psychology and Primitive Culture, man's conservative tendencies will lead to selection from among any new elements which may appear. By no means everything that knocks at the door is admitted. Still more important is the geographical aspect of the matter. That which forms a natural whole in the Tropics, will be unnatural in the Arctic; a complex which is closely associated with the sea cannot find its way across a desert without disintegration. Some elements penetrate a long distance, while others soon fall out, and, at a certain distance from the starting point, there will consequently have occurred a change such that even if the elements actually persist, the structure of the complex will often be quite different. The fundamental culture elements of mankind are not very numerous; but the wealth and varieties of cultures the world over have developed just because the component elements have appeared at different times and places, and the meeting of two elements with originally distinct associations may sometimes result in the creation of an entirely new pattern, such as for instance the feudal and guild systems of the Middle Ages, both of which, as historians have shown, arose out of the merging of Germanic and Roman elements.

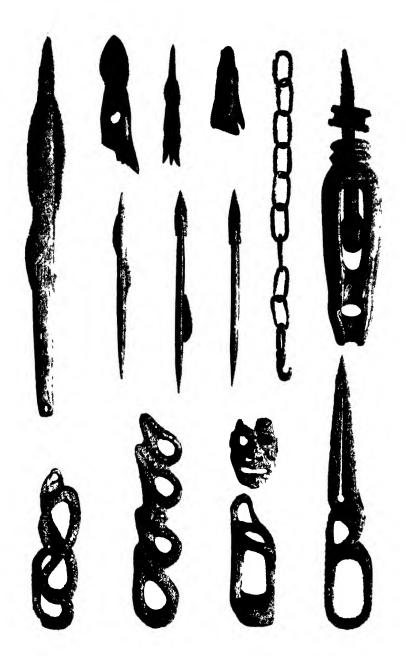
This discussion has been necessary in order to make clear the difficulties to be encountered in handling a problem such as

the origin of Eskimo culture. Rink considered that he had found its native home in Alaska. The gradual transition there between Indian and Eskimo culture led him to believe that one could actually observe in this area the transformation from inland to coast life. In reality, the transition is due to the fact that the Eskimos have exercised a very strong influence upon the Ingalik Indians of the Lower Yukon, while both peoples have at the same time been under the strong influence of the Tlingit, who are representatives of that remarkably developed culture on the northern Pacific coast – the peak of American non-agricultural cultures.

That this is actually the case is indicated by the fact that many elements which particularly distinguish the Alaskan Eskimos from their eastern kinsmen have their centre of gravity among the North-west Coast Indians. Some of these elements have travelled far, labrets, for instance, have reached the Mackenzie River, and the farther we go south in Alaskan Eskimo territory, the more numerous do evidences of contact appear: the rich wood carving, the use of paint and paint symbolism, the feasts at which presents are distributed, slavery, raven myths, platform burial, head trophies, besides many lesser features such as twined basket work, box drums, feather head-bands, rattles, etc. Very little seems to have originated in the interior of Alaska. On the other hand, more seem to belong to Asia: the built-up sledge, ice scoops made of a net stretched in a bone ring, the chest yoke, slat and plate armour, and so on. Finally, there are also certain elements which occur on both sides of the northern Pacific, concerning which we cannot at present decide the direction from which they have reached the Eskimos. Such are pile buildings and earth lodges with fireplace, the sweat bath, and the like. As we see, Eskimo culture in these regions, where two continents meet, has had peculiar opportunities for assimilation, and the Eskimos have known how to utilize them in their cultural development, but these afford no explanation of the origin of the distinctive Eskimo culture itself.

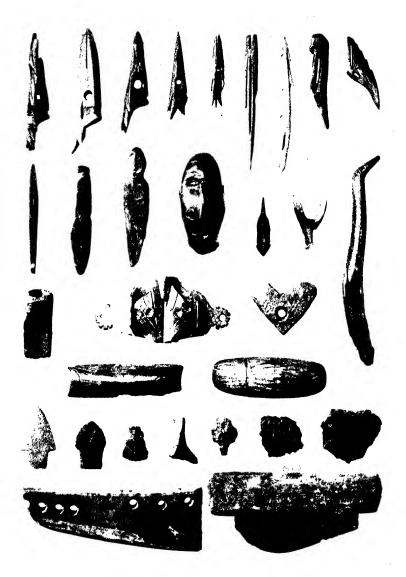
Other areas and other facts must, therefore, be considered.

¹ Labrets seem to have a remarkable history in Alaska. They occur in some of the earliest phases of Eskimo culture (Kachemak I and Ipiutaq), but disappear in the later periods only to turn up again in comparatively recent times.



Elements of the Palaco-Eskimo Ipiutaq Culture, North Alaska. Dagger and arrow points of antler with side-blades of chipped flint; harpoon heads; chain, swivels and carvings of antler.

National Museum, Copenhagen



Elements of the Neo-Eskimo Okvik Culture, St. Lawrence Island. Harpoon heads; carvings and sledge runner of walrus ivory; stone implements; sherds of pottery, etc.

National Museum, Copenhagen

In a review of Rink's work The Eskimo Tribes Murdoch expressed the opinion that the Central tribes had the most primitive culture, and therefore he placed their home south (sic!) of Hudson Bay. In the same year Boas indicated the Central regions as the probable home of Eskimo culture on the ground that this area conforms most closely with the indications of Eskimo legends; in this view there is a concrete element of more weight than Murdoch's subjective estimate of the culture stage. Boas's hypothesis has, however, acquired special significance through Steensby's more extensive researches. Steensby compared the Arctic and the sub-Arctic culture types and sought to discover which was the earliest.1 In order to answer this question he divided the various occupations and hunting implements into three groups. The first, which for instance includes caribou hunting methods, salmon fishing and their appurtenant weapons, bow and leister, exists everywhere and so throws no light on the problem. In the other group are reckoned those elements whose distribution is centred in the two marginal regions to the east and west, i.e. principally in the sub-Arctic regions (seal hunting with the kayak and net, whaling from the umiak, etc.), and are lacking in the Central regions. Finally, in the third group we find the methods which belong essentially to the Arctic culture phase, viz. ice hunting, dog sledge, snowhouse, etc.

The point at issue is the age of the two latter groups. Steensby admits it might look as if the third or Arctic group were the youngest, as it gives the impression of having split the older, sub-Arctic culture into a western and eastern branch. Nevertheless, he considers that this is not the case, but that the Arctic group is on the contrary the oldest. This is apparent in one of the sub-Arctic regions, viz. Greenland (cf. p. 102). Moreover, it is in the Arctic phase that we find those elements which are really characteristic of the Eskimo mode of living, while the specially sub-Arctic elements are on the other hand due either to specialization (kayak hunting) or to adoption of foreign culture elements (e.g. seal hunting with the net and whaling from the umiak), for the explanation of which he would especially invoke Asiatic influence. That these elements are lacking in the Central

¹ Steensby does not reckon with the high Arctic culture as a separate phase as we do. This, however, is of no importance in this connexion, as it is plainly an offshoot of the Arctic culture. Cf. p. 97.

regions is in his view to be regarded as simply a result of unfavourable geographic conditions.

Considering then that the Arctic culture is the earliest, he sets out to define the scene of its development, which thus would be synonymous with the cradle of the whole Eskimo culture, and after a careful evaluation of the natural conditions he arrives at the conclusion that it must be somewhere between Coronation Gulf and Hudson Bay. In the peculiar geographic character of these regions, marked as they are by an absence of wood, the months-long sea covering of smooth winter ice, the abundance of seals and the immense, wandering herds of caribou, he finds a suitable background for the process of adaptation that has led to the development of the Arctic culture phase and thus to the development of the whole Eskimo culture.

He calls this earliest, Arctic culture the Palaeo-Eskimo. Only when the Palaeo-Eskimos had spread as far west as Bering Strait and had come in contact with Asiatics (Steensby goes so far as to point especially to Japanese fishermen!) did the culture take on a new impetus, partly by means of a special adaptation to the less severe conditions, partly by the absorption of outside elements. This, then, gave rise to a later, Neo-Eskimo layer in the culture, which gradually spread eastwards, although the extreme Arctic climate prevented it from taking permanent root in the Central regions, where the old Palaeo-Eskimo culture stamp was consequently preserved.

It will be seen that a corner-stone in Steensby's hypothesis is that the absence of the so-called Neo-Eskimo elements in the Central regions is due to the environment. We have here an undeniably weak point; for as Hatt has since shown, not only is it improbable that the absence of the umiak and seal net in the Central regions can be put down to geographical causes, but there are also other congruities between the two peripheral regions in respect of which the explanation given is quite out of the question, for instance the use of gut-skin frocks and urine tanning. It will be understood that Hatt arrives at the opposite result to that of Steensby: the central layer must be the latest, the peripheral the earliest.

Despite their differing opinions as to chronology, however, Steensby and Hatt do agree in reckoning with two great culture sources, a westerly one in Alaska and a central one in the regions round the North-west Passage. This is fully confirmed by a despecial implements for breathing-hole hunting have a markedly central distribution. To these we may add a number of elements that are found in their most developed forms in the Central regions, while they have retained a more or less primitive stamp in the marginal areas (snow-hut, kayak, cut of skin

clothing, stone pot, etc.).

Many more elements are, however, peculiar to the two marginal regions. Besides those mentioned by Hatt and Steensby there are numbers of others: certain small objects for use when sewing (the boot creaser, special forms of thimble holder and needlecase, if not the needlecase as the whole); the stool for use when hunting on the ice; the 'kayak stand' for holding the harpoon line; the so-called half-frock; the ridge tent, etc. Some objects have in the marginal regions a form different from that found in the Central regions, such as the small drums and the short frock for men, which is edged with fur instead of with fringes. In the social and religious fields we might mention the lampoons and the significance of the moon. Some elements which occur in the Central regions are nevertheless rarely used there, for instance the bola, coiled baskets, and deer-hair embroidery. That a cultural stream has actually flowed from west to east, starting in Alaska, appears from the fact that, included in these many elements are some that display quite special connexion with Siberia (sails, needle-and-thread tattooing, special forms of ornamentation such as chain-links and drawn strips of skin, pottery, and possibly the bow drill, despite its wide diffusion). Similarly other features are associated with the North-west Coast area and, strangely enough, with the southern form of this culture in the region round Vancouver Island (composite fish-hooks, floats for the harpoon, whaling, urine washing, covered stone graves). A few elements are found in both Siberia and on the North-west Coast (eye shade and the toggle-shaped harpoon head). Certain details of some implements also show that they originated in the west.

Compared with the culture centres in the west and in the Central regions, the eastern regions can be credited with comparatively little that is new. Even though one may instance certain independent developments in Greenland, especially to the east, in ornamentation, the relating of legends, and religion, these pale completely by the side of the other two centres.

With regard to the age of the western and central culture centres and the waves that have emanated from them, we are, however, no farther than before. New contributions towards the solution of the problem were made by Jenness on the Canadian Arctic Expedition and by Knud Rasmussen, Therkel Mathiassen and the writer on the Fifth Thule Expedition. In an earlier chapter we have seen how the Eskimos of the Northwest Passage cannot be regarded as being a purely coast population, but that they are at a transitional stage between inland and coast dwellers. Jenness advanced the opinion that the Copper Eskimos have only recently made their way to the sea, and we came to exactly the same conclusion with regard to the groups farther east, the Netsilik and Iglulik tribes. Mention has already been made of the various circumstances which indicate a similar recency for the annual migration of a few Caribou Eskimos to the coast, and it seems possible to date the beginning of the latter, by historical means, to as late as the eighteenth century.

Decisive proof of the correctness of the hypothesis of a late migration from the interior to the coast exists in the comprehensive archaeological excavations made especially by Mathiassen and Knud Rasmussen in these regions. While the present coast population spend the winter in snow-houses and live at least as much by caribou hunting as by sealing, relics have been excavated from the numerous ruins of permanent whalebone houses which point to a time when life was much more connected with the sea. The earlier population pursued whaling on a large scale, knew the umiak, and made nets of baleen which played a great part as a material for implements. This culture, which is known as the Thule culture, vividly recalls the culture which is still to be found in the marginal regions. The culture in northern Alaska, on Southampton Island until its original inhabitants died off in the winter 1902-3, and in northern Greenland may in reality be regarded as being more or less modified modern offshoots of this old culture, so that there was once an unbroken chain of sea hunters extending from Bering Strait to Greenland.

To a superficial observer Hatt's view of the dating of the

the investigations referred to have fully shown that the geographic conditions have not excluded the whaling culture and all that belongs to it from the Central regions, but that on the contrary it flourished there right up to the time when its continuous distribution was broken by a new infiltration of people from the interior. Nevertheless, we are still some distance from the solution of the problem. For even if the Thule Culture preceded the present stage in these regions, this does not imply that it is as a whole the earliest form of Eskimo culture.

In the first place there is the remarkable circumstance that the Thule Culture types are in many cases more developed than the corresponding types now to be found in the Central regions, which agrees very poorly with the argument that they are the earliest. This is true of certain types of fish-hooks, bird-snares, dog-harness, etc. In order to find an explanation we must turn our attention to the archaeological investigations that have been carried out since the Fifth Thule Expedition. We shall begin in the West and first simply state the results; afterwards we may try to combine them with the ethnological facts.

In his time Dall believed he could differentiate between three layers of occupation on the Aleutian Islands, each representing a specific phase of culture: the lowest layer consisted exclusively of the shells of the sea urchin, left by an extremely primitive population; above this was a layer in which the shells of molluscs and bones of cod, halibut, and salmon indicated a race of fishers who were, however, still at such a low stage that the use of fire was, as in the earlier period, unknown (sic!); and finally, the top layer contained remains of large aquatic animals such as whales and seals, sea lions and walruses, corresponding to the Aleutian culture known to history. This course of development, as thus sketched, must in itself be said to lack inherent probability, and it has in fact been proved, through Jochelson's later excavations, to be based upon misinterpretation of the conditions. It is true that renewed investigations, notably by Hrdlička, Quimby, and Laughlin, have shown certain differences between the earliest and the later phases of Aleut culture, but the fact still remains that there is a remarkable uniformity throughout all periods, including the very first, which according

to Carbon-14 analysis dates from about 2000 B.C. The same uniformity occurs in the regions farther east on the Pacific coast. In Cook Inlet Frederica de Laguna was able to distinguish between three periods of cultural development, called Kachemak I-III after Kachemak Bay at the entrance to Cook Inlet. The last period we also found, in almost identical form, in Prince William Sound, whereas here most traces of earlier occupation seem to have been washed away by the sea on account of a recent sinking of the shore line. Finds suggesting Kachemak III, though mixed with Aleut types, have also been made at Kaflia and Port Möller on the Alaska Peninsula, whereas on Kodiak Hrdlička's crude excavation methods have destroyed any trace of stratigraphical evidence.

Both on the Aleutians and on the Pacific coast the early inhabitants obtained their staple food by hunting sea mammals and fishing. They lived in semi-underground, sod-covered houses with open fireplaces, and stone lamps were used for lighting. Weapons and tools were made of chipped stone, and decorative art consisted of rather crude, linear designs. In the course of time a few new elements were introduced, e.g. pottery and fishing nets; polished slate replaced chipping, and there was some development in art, culminating in certain remarkably sculptured stone lamps characteristic of the Kachemak III period. About the same time the first rare traces of metal make their appearance, and there is a slight but growing Indian influence.

It is possible that still earlier remains than those described here may one day turn up in this area. On the small Rabbit Islands (Anangula) in the Aleutians, Laughlin has discovered microblades, polyhedral cores and chipped stone scrapers the age of which is still uncertain, but the character of the types clearly indicates a very considerable antiquity and shows an unquestionable relation to the earliest finds from the mainland which can reasonably be connected with Eskimo culture. At Cape Denbigh in Norton Sound, Giddings found in 1948 a clear cultural sequence where below deposits from later periods there was a sterile layer of sandy clay and beneath that a basal stratum containing implements of finely chipped chert, obsidian and chalcedony. Besides microblades and polyhedral cores there were also that characteristic Old World type, the burin (a tool for cutting grooves in bone and antler made from a flake

from which tiny spalls were struck at one end to form a cutting edge) and obliquely flaked projectile points suggesting some of the earliest known cultural remains on the North American continent. The age of this so-called Denbigh Flint Complex is not yet known with certainty, but probably it dates from somewhere between 4000 and 3000 B.C.

Similar assemblages were excavated by Helge Larsen from the lowest levels in the Trail Creek caves on Seward Peninsula, by Solecki in Brooks Range, and by MacNeish near the Arctic coast south of Herschel Island. At Trail Creek no burins occurred, and part of the find may be slightly later than that of Cape Denbigh. Whether we are entitled to use the word 'Eskimo' in connexion with these finds is, of course, highly problematic. Typical microblades and polyhedral cores have also been found in Central Alaska and as far south as near Fort Liard in the south-western corner of the North-west Territories. On the other hand the Denbigh tradition has continued in undoubted Eskimo horizons. The Alaskan Ipiutaq Culture and still more the Sarqaq Culture in the eastern Arctic, both of which will be discussed presently, show clear relations to the Denbigh Complex.

If we go a little north of Norton Sound, to the region around Bering Strait, we find archaeological evidence of a typical Eskimo culture, characterized by some problematical implements and a highly developed art consisting of nucleated circles and ellipses surmounting low, rounded elevations and often suggesting the eyes of an animal, together with straight and curved lines, singly or in pairs, raised borders and rounded projections. This so-called Old Bering Sea Culture was discovered by Jenness in 1926, and since then extensive excavations by Collins, Geist and Rainey have revealed its occurrence on St. Lawrence Island similar results have been obtained by S. I. Rudenko on the Siberian coast between Cape Dezhnev (East Cape) and Cape Bering. The scroll-like patterns are unique among the Eskimos, and it is clear that they are far from being primitive. A variety of this art, in which the rounded bosses and the animal-like composition of the motifs are missing, has been described by Rainey as characteristic of what he has called the Okvik phase (originally thought to be older than Old Bering Sea proper, but according to recent investigations possibly slightly later), while Collins has traced the development of the

rich and variegated art through an intermediate stage, the Punuk, to the degenerated art of the modern Eskimos.¹

Apart from the difference in art and the gradual change due to development of old types and certain new elements filtering in, the general aspect of these cultures is remarkably uniform. Seal and walrus were hunted by means of toggle harpoons provided with floats, either from kayaks or from the ice-floe in winter. Umiaks were also known and used for whaling. The question has been raised whether dog sleds were used, because trace buckles and other equipment for dog harnesses are missing; but the number of dog bones can hardly be explained if dogs had not been employed for traction. It should be remembered that the present Central Eskimos very seldom use trace buckles, and their dog traction would scarcely leave any demonstrable archaeological traces at all. The dwellings were semi-subterranean earth lodges with walls of horizontally laid timbers; unfortunately the construction of the roof is not known, but it was, at any rate, not likely to have been supported by posts. Crude pottery was known and used for the manufacture of cooking pots and saucer-shaped lamps. Stone implements were both chipped and polished, but in early times chipping predominated.

It is clear that the Old Bering Sea cannot represent the earliest stage of Eskimo development. This view has been confirmed by the excavations of Helge Larsen and Rainey. At Ipiutaq, near Point Hope on the north-western tip of Alaska, they found sites of a very large village and numerous graves. The houses had open hearths and roofs resting upon four posts very much like those of the modern Eskimo in the interior and in South Alaska, and the enormous amount of implements made of caribou antler compared with those of walrus ivory testifies to the great importance of land hunting. Indeed, it is believed that the Ipiutaq village was a spring and autumn settlement, the inhabitants spending a great deal of the year hunting inland. A point of paramount importance is that whaling was, apparently, entirely unknown. Flint chipping was prominent, although it did not quite reach the same degree of perfection as that of the Denbigh Complex, but polished stone implements are very scarce. Most remarkable is the fact that scraps of iron,

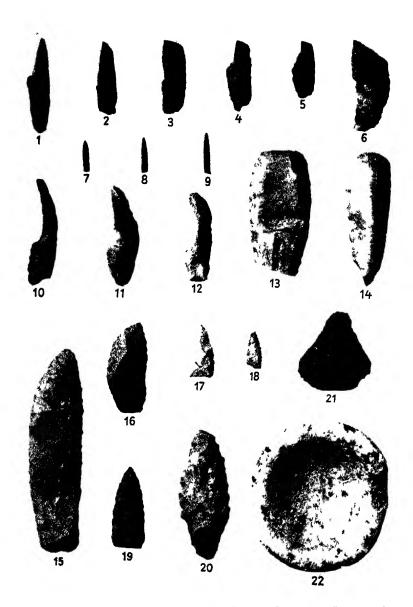
¹ Punuk is the name of three islets off the south-eastern coast of St. Lawrence Island. Okvik is a locality on one of these islets.



Excavated house ruin on Clavering Island, in the now uninhabited region of North-east Greenland



Caribou Eskimo grave on the west coast of Hudson Bay. The custom of erecting a pole at the grave is probably of Cree origin



Elements of the Palaco-Eskimo Sarqaq Culture, Disko Bay. Burins and burin spalls, scrapers, chipped knife blades and projectile points, round lamp, etc

Nutronal Museum Copenhagen

the highly developed art, which is primarily a bone carving in animal style related to but otherwise distinctly different from the Old Bering Sea, and the numerous specimens of quite enigmatical trains of the state of the stat

tical, twisted bone carvings suggesting imitations of metal types.

More recently the Ipiutaq Culture has been found in several places in northern Alaska. Most important is Larsen's excavation of a large ceremonial house (qalgi) at Deering, because here a great number of otherwise perishable artefacts had been preserved in the permanently frozen soil, including bark vessels, snowshoes and toy models of kayaks with half-decks, thus corroborating the previously expressed view of the semi-continental character of the cultural pattern. A slightly later variety of the same culture, described as Near Ipiutaq, occurs at Point Hope, Cape Denbigh and much farther south in Kuskokwim and Bristol Bays. Here there are whaling harpoons (although few in number), small lamps made of crystalline rock, and hard and thin, check-stamped pottery superior to the poor Old Bering Sea ware.

The question of the relative ages of the Ipiutaq and Old Bering Sea Cultures has caused an animated debate between Collins, who insists on the priority of the latter, and Helge Larsen, who maintains the opposite view. Probably the absolute time difference is not very great, and the radiocarbon dates so far obtained are so few and uncertain that too much weight should not be attached to them. According to the latest analyses, Ipiutaq belongs to the centuries between about A.D. 1-200 and 5-600, and Old Bering Sea to a partly overlapping but on the whole slightly later period. The conclusive point is, however, that in the Ipiutag Culture proper such important elements as whaling and pottery are wholly, and stone polishing practically absent, thereby proving its more old-fashioned stamp. There is nothing extraordinary in the fact that two cultures of different levels may exist side by side even within a very restricted area; in the Danish Stone Age, mesolithic hunters and fishermen survived at the coasts long after the neolithic farmers had occupied the interior of the country.

¹ Near Ipiutaq may correspond more or less to Giddings's Norton Culture from the middle layers of the Denbigh site, Eschscholtz Bay, etc. Unfortunately there is so far no description of these finds.

In time, the Ipiutaq Culture at Point Hope gave way to the so-called Birnirk Culture, the remains of which are found over large parts of northern Alaska and as far as Medvezhiy Ostrov (Bear Island) off the mouth of the Kolyma on the north coast of Siberia. In many respects it is similar to the Punuk phase at Bering Strait. Here for the first time on the shore of the Polar Sea we have evidence of a maritime life where whaling played a considerable part. Clay lamps and pots, polished slate implements, etc., are found. The Birnirk Culture was gradually transformed into a Thule Culture, almost though not quite identical with that previously mentioned from the Central regions, and the Thule Culture in its turn passed into a late prehistoric phase called Tikeraq after the native name of Point Hope. The last cultural stage in North Alaska is characterized by a revival of Thule types with a few additional elements of eastern origin, as for instance the broad stone lamps instead of the earlier ones made of pottery; obviously this is the result of a 'backwash' of Thule Culture from the Central regions due to the previously mentioned advance of inland tribes there.

After this survey of the archaeology in the Western regions we may proceed to the eastern Arctic. The Thule Culture is not the only prehistoric phase found there. As early as 1925 Jenness called attention to a peculiar culture in the country around Hudson Bay, which he named after Cape Dorset on the southwestern tip of Baffin Island, and recent investigations have brought even more remarkable remains to light. Implements of chipped stone closely related to the old Denbigh Flint Complex have been found not only at the outskirts of the Eskimo territory at Dismal Lake south of Coronation Gulf and Knife River near Churchill, but also at Fury and Hecla Strait, in the Peary Land area, and at Disko Bay in West Greenland. On raised beaches, 125 to 170 feet above sea level, at Cape Elwyn or Kapuivik on Jens Munk Island near the eastern entrance to Fury and Hecla Strait, Meldgaard discovered an assemblage of burins, microblades, and both symmetrical as well as tanged asymmetrical points, probably for arrows, together with arrow heads made of antler, flint flakers, bone needles with eyes, and harpoon heads with open shaft sockets. Radiocarbon analysis dates this find from the third till some time within the first

¹ Birnirk is a distortion of Perniaq, the name of a summer camp near Point Barrow.

millennium B.C. Roughly of the same age are the earliest finds, including burins and microblades, from Danmark Fjord immediately south of Peary Land, although here the upheaval of the shore lines amounted to 40 feet only. Finally, at the famous site of Sermermiut in Disko Bay, where there is a clear stratigraphy, the bottom layer was again characterized by burins, slender lanceolate and often tanged projectile points, small triangular arrow heads, scrapers of different types, etc., all of them made of chipped silicious slate (locally known as angmaq), but no microblades. From other sites in Disko Bay came fragments of saucer-shaped soapstone lamps, adze blades, etc. These finds are probably somewhat later than those from both Danmark Fjord and Fury and Hecla Strait but still belong, according to Carbon-14 dating, to the last millennium B.C. The whole complex from the eastern Arctic has been named Sargaq, after the place of the first small find made in West Greenland in 1948.

The Dorset Culture, which, as just mentioned, was first recognized by Jenness, has since then been found in Labrador, in the northern part of Newfoundland, in North Greenland including the Thule District, Peary Land and Disko Bay, on Southampton Island, and as far west as King William Island, but it is especially Meldgaard's extensive excavations at Kapuivik and Alarneg, the north-easternmost tip of the Melville Peninsula, that have thrown a clearer light on this culture, which seems to represent a foreign intrusion with affinities to the late Archaic and early Woodland horizons of eastern Canada and the northeastern United States. At Alarneq the Dorset remains were situated on the beach terraces between 26 and 72 feet and probably dated from some centuries before the beginning of our era till about A.D. 1300. It is a remarkable fact that the earliest Dorset implements include large harpoon and lance heads with open sockets and polished slate points, which were only gradually replaced by the small harpoons and chipped flint blades of the later periods. True burins are lacking, but a kind of burin-like tool occurred. Peculiar to the Dorset Culture are gouged holes instead of drilled ones; apparently neither the bow-drill nor bows and arrows were used. Art does not appear till the late periods, from which several animal figurines of ivory, often decorated with 'skeleton designs', were found. The houses were small and rectangular, only slightly dug into the ground and without entrance passages, but large communal

houses appeared rather early. Sleeping platforms were placed at the side walls, there were open hearths, and small stone lamps, at first rectangular, later oval or triangular, were used for lighting. Neither pottery nor any indications of the use of kayaks and umiaks exist, but only of small sledges drawn by man-power. Seal and walrus were hunted, but caribou were of equal importance, and whaling was not known at all.

Although there can be no doubt that Dorset is older than Thule, it nevertheless persisted for some time during the early Thule period in the Canadian Arctic, and notwithstanding the fact that contact between their bearers seems to have been anything but peaceful, there is plenty of evidence of mutual influence. Thus, the Dorset people adopted the entrance passage with the 'cold trap' of the Thule house, and some elements of the eastern Thule Culture which do not occur in its early phase in Alaska probably date from this period, for instance the broad, semilunar soapstone lamp, the soapstone cooking pot, the snow knife and possibly also the fully developed snow hut and breathing-hole hunting, all of which apparently originated under severe Arctic conditions such as we find at the Northwest Passage and the coasts of Hudson Bay.

The first migrations to Greenland proceeded via Smith Sound and the channels farther north in the Sarqaq and Dorset periods, some waves continuing along the north coast of the country to Peary Land and others across Melville Bay. How far to the south they got has not yet been archaeologically ascertained, but a pure Sarqaq site was excavated in Godthaab Fjord, 1958, and the traces of habitation which Erik the Red found in the south-western fjords (982-5), originated beyond doubt with such early immigrants.

About A.D. 1000 the Thule District was, however, populated by Eskimos bringing with them a typical Thule Culture, which in fact derived its name from this locality, and curiously enough there are even some traces of a direct connexion with northern Alaska, probably across the Arctic archipelago. The Thule Culture spread rapidly to the south along the west coast of Greenland. The later phases of this migration have been elucidated by the systematic researches of Mathiassen and Larsen. The oldest finds from this period in West Greenland were brought to light in Disko Bay and show no signs of Norse influence; they belong to the eleventh to thirteenth centuries A.D.

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Next in age comes a great find from Inugsuk in the Upernavik District from the thirteenth century; here there is already unmistakable evidence both of connexion with the Norse settlements and of local developments which separate the culture from the Thule Culture proper. The late Inugsuk Culture is characterized by the increasing importance of kayak hunting as shown, for instance, by the appearance of the waterproof kayak frock, the ring-shaped 'kayak stand', etc. The large, rectangular communal house is likewise a late Inugsuk type.

Not till the latter part the of the fourteenth century did the Thule Eskimos arrive on the east coast round Cape Farewell, when not only Angmagssalik but even far-away Kangerdlugssuaq received their inhabitants. As late as the eighteenth century the Angmagssalik culture was in all essentials identical with that of the west coast, the peculiar East Greenland stamp being due, in a very considerable degree, to local development in the early nineteenth century. The immigration round Cape Farewell did not stop at Angmagssalik and Kangerdlugssuaq, however, but reached at least as far as Scoresby Sound. One or two other waves of Thule Eskimos seem to have followed the north coast of Greenland. A complete umiak frame was found by Count Knuth on Peary Land, and Clavering Island was colonized, apparently from the North, some time in the fifteenth century.

Naturally the question now arises how the results of all these investigations should be combined into a coherent picture. Attention has already been called to the fact that the Denbigh Flint Complex shows close affinities both to the Sarqaq Culture and to finds in the interior of Alaska and northern Canada. On the other hand its origin must be looked for in the Mesolithic of the Old World, where Okladnikov has found, in the lower Lena region, such characteristic elements as burins, microblades, polyhedral cores, and side-blades. If we then consider the more typical Eskimo cultures, we find some connecting links between the oldest phases throughout the area, i.e. Sarqaq, Kachemak I, Ipiutaq, and Dorset. Whaling is entirely absent, and except in Kachemak I caribou hunting has a prominent position beside sealing. It is evident that these culture types have a much more pronounced inland stamp than the later forms. On the other hand the Near Ipiutaq, Old Bering Sea,

Okvik, Punuk and Birnirk Eskimos were whale hunters and thus much more adapted to the sea than their predecessors. The Thule Culture is mainly an offshot of the Birnirk, just as the historic cultures in northern Alaska and in Greenland are slightly modified continuations of the Thule. Whaling forms a connecting link between all these cultures from Near Ipiutaq and Old Bering Sea and onwards, and it will be seen immediately that they correspond closely to what Steensby called the Neo-Eskimo layer. If this is the case, Ipiutaq, Sarqaq and Dorset, with their unmistakable half-coast, half-inland stamp, must be termed Palaeo-Eskimo. The position of Kachemak I is not quite clear, because it is very imperfectly known. It is certainly closely attached to the coast, but on the other hand whaling hardly existed.

Several very old-fashioned traits have been preserved in the recent culture of the Aleut and Pacific Eskimos, such as the long fur coat without a hood, the partiality to barbed instead of toggle harpoons, the small lamps for lighting only, open fireplaces, and stone boiling. On the other hand all the most distinguishing Neo-Eskimo elements also occur, perhaps originally even harpoon whaling, though faint traces only have survived among the Chugach. Otherwise the culture has here apparently developed along its own lines. Among the Chugach no less than 30 per cent. of its elements are circumpacific or belonging to the American North-west Coast. The former include for instance whaling by means of poisoned lances combined with esoteric rites, stone pecking, mummification, slavery, etc., whereas heavy splitting adzes, secret societies, and potlatch feasts probably spread from the North-west Coast. Of Asiatic origin is probably also the Aleut house with entrance through the smoke hole and the well defined pottery of South Alaska, which differs from that north of the Yukon but may be related to the Yayoi and Jômon wares of Japan.

In some respects Steensby's conception of the Palaeo-Eskimo culture must be modified. He was of opinion that it originated in the central regions as an adaptation to coastal life, and considered breathing-hole hunting and the blubber lamp as its very foundations. We have now seen that the early cultures had open fireplaces, and we cannot be sure whether sealing at the breathing-holes was known, but the probability is that it was not. On the Aleutians and the Pacific coast it is more or less

ORIGIN AND DEVELOPMENT OF ESKIMO CULTURE 195 excluded on account of climatic conditions, and the Ipiutaq people probably spent the winter hunting caribou and fishing from the lakes inland.

There are various indications that sealing and walrus hunting at the ice edge are older than hunting at the breathing-holes. This is in accordance with Old World conditions where there is abundant evidence of ancient seal and walrus hunting not only from north-eastern Asia, but also from regions as distant as Kola and Norway. The Sarqaq lamps are similar to both early Aleut and certain primitive Eurasiatic types. Harpoon heads practically identical with those from Ipiutag have been found in Norway, dating from late Stone Age or early Bronze Age up to early Iron Age. The Ipiutag earth lodge is the same as the houses of the Yamal Peninsula from the tenth to the fourteenth centuries and those of the Ostyak, Vogul and Gilyak of later times. Still more significant is the close relationship which has been pointed out between the Ipiutag and Scytho-Siberian animal style. Thus the Palaeo-Eskimo culture has so many affinities with the Old World that a connexion between them cannot be dismissed.

The Neo-Eskimo stage is primarily characterized by whaling with harpoons and floats as well as by certain other elements such as sealing with nets, polished slate implements, pottery, etc. Steensby supposed that its original home was in Alaska, and there is no reason to doubt the correctness of his view. Whaling with harpoons is a circumpolar occupation that is also pursued on the southern part of the American North-west Coast among the Nootka, Makah and others, as well as in Japan, but since very early times it has also occurred in north-western Europe. Polished slate implements have likewise a circumpolar distribution, but there can be no doubt that they were adopted from Asia by the Neo-Eskimos. The use of polished slate in the early Dorset phases was a transient phenomenon taken over from the Woodland cultures. It is possible that the Aleut played a considerable but as yet unsolved part in the formation of the Neo-Eskimo complex.

The superiority of the Neo-Eskimo Culture enabled it to spread eastwards. The situation of the Thule ruins in the central regions furthermore indicates that it was still favoured by the submergence of the land which gave the larger aquatic mammals better living conditions than to-day. However, as formerly mentioned, the Dorset people of the eastern Arctic lived for some time in contact with the Thule immigrants, and some traits characteristic of the central Thule, transferred to northern Alaska with the 'backwash' of the Thule Eskimos in late prehistoric times, seem to have originated during this period of contact or to have been actually adopted by the Thule settlers from the Dorset population. These are, in fact, the conditions of the central culture centre, which consequently turns out to be secondary, compared with that of Alaska.

It has already been stated that the modern culture of the Central Eskimos was brought to the coast in fairly recent times, i.e. within the last few hundred years, by an advance, or perhaps better infiltration, of tribes from the interior. The basic stamp of this culture is therefore continental, but an analysis of its elements shows that it also includes a rich inheritance from the Thule period. It looks as if the immigrants, while retaining as much of their original inland culture as possible, simply took over from their predecessors on the coast all elements necessary to their maritime way of living. Thus a new, so-called Eschato-Eskimo culture layer developed subsequent to the Neo-Eskimo culture in the central regions. It is most pronounced on the coasts of the North-west Passage, is weaker in Baffin Island and can still be traced in Labrador and the Thule District of Greenland, where it was introduced as late as about 1864 by immigrants from Ponds Inlet. Together with the advance to Hudson Bay of some Caribou Eskimos in the eighteenth century and the diffusion of the Aivilik tribe to Southampton Island after its original inhabitants had become extinct (1902-3), it marks the last ripples of this movement. The previously mentioned, comparatively recent reflux of Thule elements to North Alaska from the east is no doubt related to the Eschato-Eskimo advance in the central regions. The Eschato-Eskimo expansion must almost certainly be associated with the upheaval of the land that took place towards the end of the Neo-Eskimo period. It is due to this movement of the shore line that ruins and tent rings from the Thule Culture are situated up to 45 feet above the present sea level. The rising of the land has restricted the area of the large aquatic mammals, especially the whales, and must therefore have weakened a culture that principally rested upon the hunting of these animals.

The culture of the Inland Eskimo still remains to be explained.

The most typical inland dwellers are the Caribou Eskimos of the Barren Grounds, although other tribes are living in northern Alaska, and a third group is to be found in the Yukon-Kuskokwim delta. An inland culture seems to be so utterly strange to our ordinary conceptions of Eskimo life that it must necessarily be brought into relation with the cultural development at the coast. We are here confronted with three possibilities: either both ways of living are equally old, some of the primeval Eskimo bands keeping inland while others preferred to stay at the coast, and still others, perhaps, shifted from a coastal to an inland existence according to the seasons; or the tribes of the interior are an off-shoot of an original coast population; or vice versa.

Although we actually know of some Arctic peoples like the Chukchi and Korvak who are divided into coastal and inland groups, it seems difficult to imagine a 'double' culture of this kind as a really primitive stage. On the other hand we have indisputable evidence, in the Ipiutaq, Sarqaq and Dorset cultures, of a stage where coast and inland hunting were of equal importance, and until recently a great part of the Eskimos in North Alaska lived in the same manner. As to the two other possibilities, Mathiassen once maintained the view that the Caribou Eskimos were descendants of Thule tribes who had left the coast attracted by the caribou herds. I pointed out, on the other hand, that a great number of their culture elements were more primitive than the corresponding Thule types, for which reason I preferred to consider the Caribou Eskimos the last remnant of Proto-Eskimos that had remained on the tundra when the main part of the people had adapted their life to the sea. The facts that 80 per cent. of their culture elements are common to all Eskimo tribes and that many of them have a very wide distribution both in North America and northern Eurasia, are also evidence of their great age. Our discussion took place before the archaeological investigations had brought the early phases of Eskimo culture to light. At present it is evident that the Caribou Eskimos should be compared with the Ipiutaq, Dorset and Sarqaq stages and not with the Thule Culture.

Here, however, we are confronted with very great difficulties, because we know absolutely nothing of the archaeology of the Caribou Eskimos. We cannot expect to find graves and gravegoods for they simply expose their dead on the tundra, and as far as we know they have never had permanent winter houses. Therefore we have only the recent culture of these tribes to start from, and however primitive its general character may be, it has, of course, changed considerably during the centuries that separate it from the Palaeo-Eskimo periods. For instance we have no idea of their original stone technique, which is one of the most typical traits of the early cultures. One important thing should not be overlooked, however: the small lamp for lighting only, which in this respect recalls the Sarqaq and Dorset lamps. At least it seems to indicate that the inland culture is related more closely to the Palaeo-Eskimo layer than to that of the Neo-Eskimos, but on the other hand it does not decide the question as to whether it is earlier or later than the Palaeo-Eskimo stage.

The full answer can only be given by archaeological finds in the future. It seems to me, however, that at least three traits may suggest the precedence of the Caribou Eskimos, viz. the custom of exposing their dead instead of regular burial, their almost complete lack of decorative art, and their dwellings. Abandonment of the dead is a widely diffused custom among some of the most backward tribes of the earth. So far Sarqaq burials have not been found, and it is possible, therefore, that the Sargag people disposed of the bodies in the same primitive manner. The early Dorset graves were simple depressions bordered with a few stones or covered with a gravel heap. The Ipiutaq people, besides exposing their dead, also buried them in carefully made graves. We do not know if art was absent in the Sarqaq period, as it certainly was in the early Dorset phases, but in the later part of Dorset it did exist, and Ipiutaq art is extremely elaborate. The Dorset people had both snow huts and earth lodges, and the Ipiutag people had highly developed houses with walls and roofs supported by four upright posts. The Caribou Eskimos always live in snow huts during the winter. The snow hut is, however, a specialized offshoot of that extremely primitive type of dwelling, the dome-shaped hut, which in the history of mankind is certainly older than the Ipiutaq earth house. It may well be, therefore, that the culture of the Caribou Eskimos, in spite of all modifications, on the whole represents a lower level than the Palaeo-Eskimo stage or, in other words, that it should be considered Proto-Eskimo. It is not improbable that this also applies to the inland culture of ORIGIN AND DEVELOPMENT OF ESKIMO CULTURE 199 northern Alaska, and it may even be true of the culture of the lower Yukon and Kuskokwim, but of course this can only be decided after a detailed analysis.

If this be so, however, there was once a Proto-Eskimo population right from Alaska to Hudson Bay, and we can now reconstruct the prehistory of the Eskimos in terms of an increasing adaptation to the sea. Steensby, who also believed that the Eskimos were originally an inland people, was of opinion that the change to coastal life was the result of a local development within the central regions. This view cannot be maintained now that we know of the close affinities of the Denbigh-Sargag and Ipiutaq with the Old World cultures. It is more likely that the first adaptation to the sea, i.e. seal and walrus hunting, was introduced from the Asiatic coast and spread eastwards. This is the Palaeo-Eskimo stage. Afterwards a new cultural wave, the Neo-Eskimo, characterized by whale hunting, spread in the same direction. The Old Bering Sea, Okvik, Birnirk and Thule cultures enter at this point. Finally, in the central regions, there was a new advance from the interior leading to the formation of the last or Eschato-Eskimo layer. Just because the inland dwellers had remained stationary at such a primitive level, the superposition of the Eschato-Eskimo layer on top of the Neo-Eskimo stratum necessarily resulted in the culture re-assuming a primitive tinge. It is the Eschato-Eskimo infiltration which has made the situation so difficult to interpret before the archaeological investigations started, because it meant an inversion of the sequence. A summary of the development is given on p. 200.

In the preceding sketch of the history of Eskimo culture it has been possible to insert a few dates, but we are still far from being able to give a detailed and reliable chronology. We have also seen that in the Arctic Archipelago, and to a smaller extent in Peary Land, there has been a constant upheaval of the land which finally, in the regions around the North-west Passage, resulted in the disappearance of the whales and a change of the conditions of life. So far very little can be said of the climate in prehistoric times, but still one or two interesting things can be pointed out. The Denbigh people were undoubtedly favoured by the climatic optimum which prevailed in both North America and Europe roughly between 5000 and 2000 B.C. As far as Greenland is concerned, the investigations at Sermermiut have shown that the Sarqaq period here was comparatively warm and dry,

A.D.	PACIFIC COAST	BERING STRAIT	NORTH ALASKA	ARCTIC CANADA	WEST GREENLAND
	Historic	Historic	Historic Late Thule	××××××××××××××××××××××××××××××××××××××	Historic
1500	Kachemak III	Late pre- historic	Tikeraq		Late Inugsuk
1000		Punuk	Early Thule	Thule	Inugsuk Thule
500	Kachemak II		Birnirk	Late Dorset	
		Old Bering Sea	Ipiutaq		Dorset
0		?	ڊ ن <u>ا</u>	Middle Dorset	Sarqaq
- 500	Kachemak I (?)			Early Dorset	!
- 1000					
– 1500				Sarqaq	
– 2 000		?			! ! !
		Denbigh	Denbigh	- [

×××××	Eschato-Eskimos (advance of inland tribes).
	Neo-Eskimos (further adaptation to the sea: whaling).
	Palaeo-Eskimos (adaptation to the sea: sealing).
	Proto-Eskimos (inland hunters and fishermen)

probably corresponding to sub-boreal times in Europe, but that it gradually became more humid and cold. Also the Dorset people had the advantage of a rather warm and dry climate, which at the end of the period deteriorated materially and finally put a stop to habitation. Obviously, it is the comparatively mild climate that enabled both the Sarqaq and Dorset people to manage without lamps for heating, since there must have been a greater amount of driftwood available. When the Thule Eskimos took possession of the country, the climate was still cold but again less humid. A study of the ecological and climatic changes throughout the Eskimo area will thus undoubtedly contribute essentially to the understanding of the cultural development.

Obviously, the culture of the Eskimos is deeply rooted in the Old World, where there are parallels to practically all of its elements except those which are due to local development. But that does not necessarily mean that the Eskimos as a people migrated from Asia into America. If we may assume that the Proto-Eskimos lived as an inland people near the timber line from Alaska to Hudson Bay, a continuous contact across Bering Strait is all that is needed to explain the subsequent development of what we now call Eskimo culture.

A long series of important questions still remains to be answered. So far we have discussed the problems of race, language, and culture separately, but how are the results to be correlated? How and where does the Eskimo race appear for the first time? Is there any connexion between the Denbighlike finds and the occurrence of an Eskimo-like race type in the Mackenzie area? Who were the first to speak an Eskimo language? We may take it for granted that the Neo-Eskimos, including the bearers of the Thule Culture, spoke not only Eskimo but more particularly an Inupik dialect, because dialects of this type occur wherever Neo-Eskimo culture prevails at present, i.e. in northern Alaska and Greenland. As pointed out by Collins, the great conformity of the dialects in both places is partially explained by the Thule backwash to North Alaska in late prehistoric times. But does this explanation suffice? Is it a coincidence that the formative period of the Neo-Eskimo culture is roughly identical with the period when, if we may trust Swadesh's glottochronology, the Inupik and Yupik languages separated? However, if the supposition be correct that the inland tribes of northern Alaska and the Barren Grounds are modern representatives of the Proto-Eskimos, then why do they speak dialects of the Inupik type? Does this mean that even the Proto-Eskimos comprised two different though mutually related groups, one in the Yukon-Kuskokwim delta and another one farther north on the tundra, with bands of the latter roaming as far as the Barren Grounds? And why do the Pacific Eskimos speak an Eskimo dialect, whereas their culture is more like that of the Aleut? Still more enigmatical are the linguistic affinities of the early Dorset people with their Indian-like culture. Did they originally belong to a foreign stock but were gradually Eskimoized? We are here, indeed, moving on shifting sands, and our knowledge is still so deficient that for the present I prefer to leave all these questions open.

As representatives of an ancient culture layer the few and impoverished Caribou Eskimos are of paramount importance in the history of arctic culture; but if we are to arrive at a real understanding of the Proto-Eskimo culture, it is necessary to regard it in relation to that of the surrounding peoples. In America, Asia and Europe the boreal regions - by which is meant not only the tundra zones, but also that enormous belt of coniferous forest which extends far into the heart of the continents - form an ecological continuum with fundamental similarities in their resources and certain common lines of cultural development. The cultural differences which exist are due in many cases to the fact that culture layers of different ages have survived in different areas. The earliest lie on the outskirts, for they have had the longest time to spread, the latest in the centre. In this case, when we speak of the whole circumpolar area, eastern Siberia is 'the centre'.

If we turn to the great interior regions of Alaska and Canada we find that the summer life of the Indians is practically the same as that of the Eskimos, and is focused on caribou hunting and fishing by means of fences, weirs, etc. The Indians on the other hand spend the winter in quite another manner, viz. hunting caribou and moose which they can approach on snowshoes while the animals sink down into the soft snow. Their winter occupation is entirely dependent upon this one implement, the snowshoe, which has again conditioned the development of the reindeer nomadism of the Siberian tribes. To Hatt

must be given the distinction of having shown that nothing less than a revolution has been caused in the life of the polar peoples by the invention of the snowshoe. Before this it was impossible to move about in the soft, deep snow of the forests, and thus the natives had to keep to rivers and lakes, where fishing could be pursued from the ice. In other words they had to live almost as the Caribou Eskimos do. There are traces of such an ancient icefishing method among the Tsimshian and several tribes on the northern plateaux (Sekani, Thompson, Cœur d'Alêne), the Menomini and the Ojibwa. In Asia it occurs in a somewhat similar form among some of the Tungus and Ainu, and somewhat modified, among the Kamchadal. The characteristic craft of the snowshoe culture is the light birch-bark canoe, while a primitive form of skin boat, the prototype of both kayak and umiak, belongs to the ice-fishing culture. Simple skin boats still occur sporadically over large areas as survivals from this remote stage. They are recorded for the Sekani, Kaska, Chipewyan, Cree, the now extinct Beothuk in Newfoundland, the Micmac and, as the late Professor Speck of the University of Pennsylvania kindly informed me, the Montagnais of Labrador, the Algonkin at Golden Lake, Ontario, the Penobscot, and Wabanaki. Without doubt they are also connected with the so-called bull boats of the Plains Indians. A Chinese source of the seventh century A.D. is said to contain a record of skin boats among the Tungus, and there is a tradition concerning them among the Scandinavian Lapps. Another, but admittedly unreliable source tells us of skin boats among the seventeenth-century Samoyed.

In habitation and dress we can also distinguish between the older forms belonging to the ice-fishing culture and the younger associated with the snowshoe culture. The Proto-Eskimo dwelling was probably a domed hut similar to that used by the Alaskan inland Eskimos and may be regarded as the prototype both of the summer tent and the snow-hut. Similar dome-shaped huts still occur among the Kutchin, Hare, Cree, Naskapi-Montagnais, and Ojibwa, whereas elsewhere in the boreal region they have been supplanted by the conical tent. In northern Asia the domed hut is found among the Goldi and perhaps among the Ainu. In dress, which has been thoroughly investigated by Hatt, we find again two corresponding groups. The later one consists of a kaftan developed from a loose mantle, breeches which have evolved from a breech-cloth, and moccasins,

which are closely connected with the use of the snowshoe. The centre of distribution of this group lies in eastern Siberia among the Yakut and Tungus; in North America only moccasins and snowshoes have a wide diffusion. West and east of this complex we find the older group, apparently split in two by the newer. It consists of a covering for the upper part of the body derived from the poncho, breeches developed from a pair of leggings, and boots developed from a combination of stockings and sandals. The poncho shirt has a wide distribution in North America among Eskimos and Indians west of the Mississippi; in Eurasia it is found not only in the extreme north-east but also among the Ostyak, Vogul, Samoyed and Lapps. The leggingbreeches have a similar although less wide distribution. In North America sandal shoes and boots seem to have been superseded by moccasins to a very high degree, but they occur among the Eskimos, on the Plains, and in the South-west (Paiute, Navaho, Apache, Zuñi, Hopi, Walapai and others). In Siberia this type is found among the Ostyak and Vogul.

We have seen that we have often had to go outside the boreal regions to find parallels between certain elements of the Proto-Eskimo and Indian culture, i.e. elements of the ice-fishing stage. This is to be expected, for in the northern woodlands the ice-fishing layer has been overlain by later developments. There should therefore be more chance of success if one sought parallels in regions which lie on the outskirts, and this is in fact the case.

I have elsewhere shown the probability that the cultures of the North-west Coast Indians and the Algonkian tribes south of the great Laurentian lakes contain survivals of the ice-fishing layer, and since then Fritz Krause has found that the same complex is prominent in the culture of the Californian Indians. In the latter areas it is greatly changed; for both are too far south for ice fishing proper to be pursued. At the same time the east has been influenced by the regions about the Gulf of Mexico, whence the cultivation of maize and much else has been introduced. To the west there has been a specialization on the gathering of wild seeds. There are nevertheless in both the east and the west, and especially the latter if we include the plateaux in British Columbia and the Great Basin, many of those elements which mark the ice-fishing complex: the domed house, stone cooking pots, hunting in more or less complete

disguise, the primitive fishing implement consisting of a snare on the end of a stick, the simple gorge, and so on. A fishing method that can hardly be explained otherwise than as a derivation of ice-fishing is known among the Yokuts of California. Stone cooking pots occur in California and among the Shoshoni, while their distribution in the east extended from the New England states at least to Maryland and Virginia. Knives exactly similar in type to the Eskimo ulo are found in the New England states and also among the North Pacific Indians. Many objects show an especial association with the western region; such are the two-skin cut of the dress, the composite bow, the simple exposure of the dead instead of burial, the arrow straightener, bird dart and throwing board, lamp, firestone, etc.

In the Old World the position is apparently the same as in America: the ice-fishing culture is for the most part obliterated in the coniferous forests of Siberia and northern Europe, where hunting on snowshoes and still later reindeer herding have developed. In the marginal regions here we are, however, faced with the difficulty that they lie within closer reach of still more powerful sources of culture influence than in America: China, western Asia, and Europe. And yet some parallels can be seen here too, such as the exposure of the dead, which has become a regular practice in the Lamaistic form of Buddhism in Mongolia and Tibet and undoubtedly derives from ancient custom. In southern Mongolia the shaman drum has a lateral handle like that of the Eskimos, whereas the Siberian type, like that of the North American Indians, has a central grip. Sandal boots are worn by Tibetans, Kirghiz, and Vakhans. The domeshaped hut is known, not only from the Goldi, but also from the Altai Tatars, the eastern Kalmuk, and from the province of Shansi in China. Skin boats and stone pots occur in Tibet, and primitive stone lamps among the Tsaidam Mongols. Excavations have shown that the Stone Age peoples of northern China, Manchuria, and Japan used stone knives like the Eskimo ulo. More remarkable still, it is possible to point to features in remote parts of Europe which, taken separately, count little perhaps, but which, just because they occur in association, cannot be left out of consideration. We find, especially in the Celtic parts of Great Britain and Ireland, extremely simple lamps made of natural clam shell, the skin boat - the Irish

coracle - and a knife almost the same as the Eskimo ulo. A toy, which obviously originated in the throwing board, was used in Ireland until the nineteenth century. Domed huts are known from early prehistoric times and continued in the Minoan grave-domes and the Sardic nuraghi. In some parts of Scandinavia we find bowl-shaped lamps and sandals; the latter also occur in Iceland, the Shetland Islands, in the Baltic and among the Finnish peoples. Ponchos and poncho-shirts were worn by the Gauls and Germans of old, in Denmark they were known in the early Bronze Age and are still to be found among the Lapps. Bowl-shaped lamps of stone and a kind of ulo are also known from out-of-the-way corners in the Alps, resembling those used in ancient Egypt, whence the stone lamp was imported into the Aegean islands in pre-Minoan times. Skin boats are also found in Mesopotamia, and were referred to by Herodotus.

Now it is inconceivable, of course, that a uniform culture should ever have prevailed throughout the enormous circumpolar zone, and 'ice-fishing culture' should rather be understood as a term signifying a stage, characterized by certain common traits in the way of living. On the whole the culture of the Eskimos is a specialized offshoot of this stage, but there are indications that it is not wholly uninfluenced by the snowshoe complex. Such elements as the snowshoe itself, the toboggan, bark containers, tanning by means of brain substance, smoke curing of hides, etc., occur among many Alaskan Eskimos and some of them even as far back as the Ipiutaq period, although they originally belong to the forest zone. It is easily understood why they were adopted, for on their way eastwards from Asia they must have passed through Eskimo territory. On the other hand the snowshoe complex never succeeded in stamping Eskimo culture as a whole, simply because it was precluded by the arctic environment. The problem has never been studied in detail, however, and it cannot be solved without further archaeological investigations.

Unfortunately the prehistory of the northern woodlands in both Siberia and North America is still so little known that it is impossible to parallel the archaeological and the ethnological stratifications. It will hardly be too rash, however, to identify the Denbigh-like finds in the interior of Alaska and the Mackenzie region and the Siberian Mesolithic with the ice-fishing stage. I do not think we should be misled by Okladnikov's demonstration of the growing importance of fishing, in contradistinction to hunting, in the late Neolithic and Eneolithic of the Yenisei-Lena area, for of course the term 'ice-fishing' does not imply that hunting was neglected but refers only to the fact that it was more or less checked by the winter snows. So much seems certain that notwithstanding a number of circumpacific impulses during its growth, it is in the circumpolar aspects of the Mesolithic and Late Palaeolithic that the deepest roots of Eskimo culture are to be found.

The early and unsuccessful attempts to connect the reindeer hunters of the European Ice Age with the Eskimos thus appear in a new light. The theory of such a connexion was first advanced by Boyd Dawkins, who claimed an actual identity of Upper Palaeolithic and Eskimo culture and considered it a proof of racial affinity. At a later period the skeletal remains from Chancelade and Vallée du Roc (Charente) seemed to support the belief that the forefathers of the present-day Eskimos had actually followed the reindeer to the north in postglacial times, but this view has been disputed by more recent investigators. But the racial and cultural aspects of the problem must be considered separately. Bogoraz and Sollas were both advocates of what may be called the 'following-the-reindeer' theory, although the view of Sollas in some respects approached the ideas of Hatt and myself. Rivet thinks that Upper Palaeolithic man of Western Europe, the Uralian peoples, and the Eskimos are all descendants of the same stock, the cradle of which should be sought in Central Asia. Also, according to Fathers W. Schmidt and W. Koppers, the circumpolar area has gone through a uniform cultural development reaching back to the Palaeolithic; but they are of opinion that the beginning is to be found in the Lower rather than in the Upper divisions of this period. Their ideas have been supported and extended in the works of Gahs and Fritz Flor from an ethnological, and of Menghin from an archaeological, point of view.

Yet the problem is far from being solved. Though several points of similarity have been brought to light (heads for harpoons and bird darts, throwing boards, arrow straighteners – the bâton-de-commandement of the archaeologists – stone lamps, etc.), the claim has more often been met with scepticism than with approval. And this is indeed not surprising, for the

Eskimos have long been regarded first and foremost as hunters of aquatic mammals, whereas Ice Age man was an inland hunter. This objection falls to the ground if we acknowledge the Inland Eskimos as representatives of the earliest Eskimo culture. At present only one systematic investigation has been carried out from a modern point of view, that of Dr de Laguna, who has undertaken a very thorough comparison between Eskimo and Palaeolithic art. Her conclusion is negative in so far that the available material does not prove that Eskimo art is more closely related to the Palaeolithic than are other arts of simple content; but she rightly assumes that this conclusion may not be final, because too little is known about the Siberian Palaeolithic. There is as yet no reason for uncritically adopting the old hypothesis of Boyd Dawkins, but there is every possible reason for giving it a searching test. Consequently the International Congress of Anthropological and Ethnological Sciences during its first session in London in 1934 took up Knud Rasmussen's old plan regarding an international investigation of this important question and organized a committee with a view to co-operation between the countries interested in this matter. Unfortunately, the plans were frustrated by World War II and the political events of the following period, but it is to be hoped that a profitable co-operation in this field will now be resumed.

It would thus seem that over the whole of northern Europe and Asia, as well as large parts of North America, there are traces of an old cultural continuum, from which gradually, as developments multiplied, many paths have diverged. In the interior there was an adaptation to the snow of the woodlands, which in the course of time led to the taming of the reindeer in the Old World; by the coast of the Arctic development was, on the other hand, related to the sea with its ice and its mammals, and this development culminated at Bering Strait. Alone, hidden on the tundra, squeezed in between impenetrable forests inhabited by hostile tribes, and an ice-bound coast where kinsmen had developed in such a manner that they could be of very little importance to an inland population, one or two little groups continued along the track into which they had turned thousands of years before.



Elements of the Neo-Eskimo Thule Culture from the central Eskimo area. Thin whaling harpoon head; scaling harpoon heads with open shaft-socket; arrow head with conical tang and knobs on the tang; bola ball; side prong for bird dart with barbs on both sides; broad snow knife with two shoulders; woman's knife without tang; winged needle-case; toy lamp with a row of knobs near the wick-edge; fragment of oval soapstone pot; earthenware pot-sherd; piece of platform covering of baleen, etc.



Elements of the Palaco-Eskimo Dorset Culture, Ponds Inlet and Thule District. Harpoon heads; triangular arrow points; knife blades and scrapers; woman's knife with iron blade; oval lamp; quiver handle and wooden carvings with skeleton designs, etc.

National Museum, Copenhagen

CHAPTER X

Eskimos and Whites

IN the so-called Russian Museum in Leningrad I once saw two cases, the contents of which may give cause for reflec-Lation. Not because they differed from the surrounding exhibition of objects from the various peoples of the north-east corner of Asia - on the contrary! - but because alongside the cases hung photographs of the places from where the objects had come, and in these one saw ordinary Russian villages with block-houses and wooden churches, crowned by bulb-shaped dome and cross. Russian settlers have for a very long time lived by the great rivers Kolyma and Anadyr. There has doubtless been some mixing of native blood; but the Russian tongue and the Orthodox religion have been preserved. In their mode of life, on the other hand, the people have entirely associated themselves with the aboriginal population and have thus, through the Chukchi and Yukagir as intermediaries, absorbed several of elements characteristic of Eskimo culture. Not only is their fur clothing understandably enough very much the same as that of the native peoples, but weapons such as the bola, bird dart and throwing board, in fact even primitive skin scrapers with stone blades, occur among the everyday implements of these white immigrants. If one would seek an example of the tenacity of the arctic culture, a tenacity that is the result of the closest adaptation to the natural conditions, a better could not be found. European civilization, which in Greenland five hundred years ago received a mortal blow in the Norse settlements, has not fared much better at the opposite limit of the Eskimo region.

As yet the Arctic is no country for white settlers. Stefánsson has justly taken up the cudgels against the exaggerated terror with which these regions are generally regarded, but goes to the opposite extreme himself by seeing everything in the rosiest of colours. A book like *The Northward Course of Empire* should be read as the result of many years' excellent observations and

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experiences, but also with the critical mind with which one must examine all propagandist literature. That the polar countries will in future play a greater part than hitherto in the world's economy is beyond all doubt, and the last war has shown their strategical importance; but apart from one or two border areas they are still what they were at the time of their discovery: a field of activity for trade and for a very few other undertakings as mining, etc., which are only able to hold their own with the whole resources of the modern world at their back. Western civilization can support and raise the culture of the native population, or it can destroy it – in only all too many cases do the results show that the latter is far and away the easier – but so far it has put nothing in its place.

The first whites, apart from the explorers, to come into contact with the Eskimos were the fishermen in the waters about Newfoundland and the whalers in Davis Strait. The latter came especially from Holland and the first Dutch whaler had already appeared by 1619. But it was not until a hundred years later, after the Peace of Utrecht (1713) had created safer conditions, that whaling attained its peak. In one year more than a hundred Dutch ships were fitted out for whaling in these waters. The Dutch also did an extensive trade with the Eskimos and quite naturally kept to the easily accessible Greenland coasts. That their conduct was not particularly scrupulous is to be seen from the fact that the States General had in 1720 actually to issue a decree which, under threat of punishment, forbade robbery and murder of the native population! At that time, however, the foundation was being laid for the Danish colonization of Greenland, Hans Egede having landed in 1721 at the spot which is now Godthaab and begun his mission among the Eskimos. This was the first settlement in the Arctic since the Middle Ages and it introduced a new era in the history of Greenland. To this aspect of the matter we shall revert later, and here simply remark that it inevitably led to much friction with Holland. In 1739 there was a real naval battle in Disko Bay between three Danish and four Dutch ships, which were captured and made prizes. The end of these disputes was an arbitration award in 1762, according to which Denmark opened whaling to all, and the Dutch agreed not to trade with the Eskimos within a distance of four miles from the coast. With this ended the Dutchmen's contact with the Eskimos, and the

wars which followed the French Revolution resulted in their being crowded out of these northern waters entirely.

It gradually became necessary for the Scots who succeeded the Dutch to seek the whales in the more inaccessible regions to the north and west. In 1818 a whole fleet followed in the wake of John Ross a little way north in Melville Bay, and it soon became a fixed custom every summer to penetrate the ice of this bay to Smith, Jones and Lancaster Sounds. Towards the end of June the whalers usually fell in with the Polar Eskimos, who therefore called them upernagdlit, 'the harbingers of spring'. The result of this intercourse, which lasted throughout the century, was a lively barter in bear and fox skins on the one side and wood, guns and tools on the other. In a similar manner the Scots traded with Baffin Island and in the course of time established two posts there.

About the middle of the century the almost virgin possibilities of Hudson Bay were realized, and it soon became the meetingplace of a large whaling fleet from the ports of the New England states. The years round about 1870 were the period of prosperity in these waters. The methods of the Americans differed greatly from those of the Scots. Whereas the latter hunted the whales with their own crews from small barkrigged steamers, the American vessels only carried sail and served merely as a means of conveyance and a permanent base during operations which usually extended over a year or two. The whaling was carried on from small whale-boats, of which each vessel had more than she had crews for, and therefore the whole of the Aivilik tribe were often in their service. In this manner the Eskimos came into much more intimate relations with the American whalers than with the Scottish. The Eskimos received no fixed wage, but were provided with food and other necessaries, and in winter they provided the mess with fresh meat. Only a fraction of the crews on these vessels were sailors, consisting for the most part of stranded and shanghaied outcasts from the harbour pot-houses of Boston and New Bedford, and were only kept in hand by means of an iron discipline. This very discipline is probably the reason why their influence upon the Eskimos was by no means as fatal as might have been expected, and cannot be compared with the earlier conditions in Alaska. In view of the Eskimo code of sexual morals venereal disease is surprisingly rare, and alcohol has never gained such a footing as in the west. Whalers and natives seem on the whole to have been on mutually good terms, and a man like Captain George Comer, who has earned great credit as a collector of ethnographic material, was at least a few years ago remembered with gratitude by the people.

In one of the first years of the twentieth century an artificial substitute for whalebone was found, the price of which fell so rapidly that whaling, which was already falling off on account of the decline in the number of whales, was no longer profitable. It is now many years since a whaler has ploughed the waters of Hudson Bay. At the same time the mighty Hudson's Bay Company – or H.B.C. as its name is usually abbreviated in Canada – made an important advance into the Arctic. Its posts are now spread on Baffin Island and both sides of the Hudson Strait and Hudson Bay, and from the regions round the Mackenzie delta it has extended its activities through the area of the Copper Eskimos right to King William Island. In 1937 a station was even established at Bellot Strait, which, however, was mainly peopled by immigrants from Baffin Island.

Fox trapping is here the main business of the company which is busy completing a transformation of the economy of the Eskimos. The changes are not entirely in the latter's favour, for to the H.B.C. a valuable man is the same as a skilful trapper, and the Eskimos are thus being more and more brought to neglect the caribou hunting and seal hunting that alone keep them provided with their most important necessaries: meat, skin for clothing, and blubber. Unfortunately the last decades have seen a constant decline in value of fox skins, and the fox of course has a trading value only, and means nothing in the domestic economy of the Eskimos. The transformation process has already gone so far that the Aivilik tribe, for instance, for a great part of the winter receive quite insufficient nourishment in the form of tea and 'flapjacks' (of flour, baking powder and water) in order that they may with so much the greater eagerness devote themselves to fox trapping. The H.B.C. has even started to sell canned goods to the people; I still remember, with all due respect, a terribly salty mixture of potatoes and carrots with scattered fragments of mutton. A greater mistake than to introduce this kind of food and to allow the Eskimos to neglect their old occupations would be far to seek, and the sooner the H.B.C. realizes that it is defeating its own ends, the

better. On the whole the Eskimo can buy what he wants from the store, so long as he pays for it. I once met an Eskimo who was the happy owner of a harmonium. To carry it on the sledge from snow-house to snow-house could not, of course, be done, and therefore it had never got outside the care of the trading post. One is at liberty to form one's own opinion about such cases!

In great parts of the Canadian Eskimo area, especially the eastern parts, the H.B.C. has a de facto monopoly, and as it seems to have acted from the first on the motto that business is business, and the Dominion Government practised no control when I visited this region, the kind of prices charged may be imagined. In fixing prices no difference was made between the Eskimos' actual necessities and fancy articles. To square accounts the Eskimos were given a number of wooden blocks, the value of which was fixed at 50 cents. Prices will not be low when this is the smallest coin! These blocks were handed back over the counter when the Eskimos went shopping. Theoretically of course they need not spend the whole amount at once; but naturally the lack of ordinary coins must encourage it.

In Canada the Eskimo problems of the future are glaringly apparent. The dangerous aspects of the absence of competition, when the trade is in the hands of such a hard-handed company as the H.B.C., are only too obvious. On the other hand, the wild race between several firms elsewhere stands out just as clearly and with equally deplorable results. They try by various means to entice the Eskimos to them, and the means are not all equally pleasant, with the result that the whole population is gradually being turned into a band of more or less demoralized idlers. The Mackenzie Eskimos have beyond doubt suffered most, for they have been exposed to a cross-fire from the coast and from the river. A number of free traders come down the river every year to buy furs, for which the Eskimos hold real auctions. No one can object to their getting as much for their skins as they can, and now neither motor schooners nor typewriters are lacking among their possessions; but they have thus been sucked into a dollar-maelstrom, the effects of which they are quite unable to foresee. As a matter of fact, a very large number of the original Mackenzie Eskimos have already succumbed, and immigrants from Alaska have taken their place.

Only in recent years has it been possible to discern any

refining influence upon the Canadian Eskimos from the white man. There are both Roman Catholic and Anglican missions, but these seem often to have made rather superficial impressions up to the present. A real benefit is, however, the phonetic system of writing invented by the Rev. E. J. Peck, which represents the Eskimos sounds in a most imperfect manner it is true, but still opens up possibilities of written communication and has now gradually spread over great stretches on both sides of Hudson Bay. In conjunction with their religious teaching the missionaries also instruct the children in various simple subjects, and the Dominion Government makes grants to the mission schools provided the attendance averages a certain limited number. Boarding schools (Roman Catholic and Anglican) have been founded in Aklavik in the Mackenzie region, and besides the mission schools there are also some run by the territorial government.

As representatives of the authorities small patrols of the famous Royal Canadian Mounted Police have been stationed here and there. Personally I have only the best memories of sympathetic and well-meaning men, who got on very well with the Eskimos and were fully conscious of their responsibilities. Unfortunately, their work has for a great part been concerned with the tracking down of murderers, often involving whole expeditions under dangers and difficulties worthy of a better cause. In the long run this situation is of course untenable if confidence in the authorities is to remain unshaken. It is difficult to justify any government's right to hang a man for a crime which to him and the community in which he lives is no crime, and it harmonizes badly with British spirit.

On the whole, the rapid development in the Arctic after World War I at first seemed to take the Canadian Government unawares; but it cannot be denied that it has very great difficulties to contend with here. On the whole the climate is more severe than in Alaska and Greenland, the area greater and the population much smaller. The census of 1951 gives the total as 9,493 (including Labrador). It is so much the more pleasant therefore to know that during the past decades there has been a distinct change in the attitude of the Government. In 1925, after his return from the Fifth Thule Expedition, Knud Rasmussen was invited to a series of conferences in Ottawa, devoted exclusively to the future of the Eskimos, and two younger Danes,

A. E. and R. T. Porsild, have succeeded in taking a herd of 3,000 tame reindeer from Alaska to the Mackenzie area where reindeer breeding is now established. In 1948 the number of deer had doubled, but the success of the enterprise is still doubtful. At the same time a number of reservations have been established where white men may neither hunt nor trap. They comprise both the tremendous islands, Banks Island and Victoria Island, and an area on the mainland bounded by the lower course of Back River and Bathurst Inlet, besides some stretches farther south in the forest belt, which do not come into consideration here. The fur prices are now constantly checked by the Government to guard the Eskimos against undue exploitation, the establishment of new trading posts is regulated by the authorities, and several hospitals have been erected. Game laws were passed 1945-8, and since 1944 the Government provides monthly family allowances of \$5.00-8.00 per child besides old age pensions and pensions for the blind.

The fate of the Eskimos will, however, also depend upon the

The fate of the Eskimos will, however, also depend upon the possibilities offered by the country for development of communications and undertakings such as mining. So far the Winnipeg-Hudson Bay railway, which was completed in 1929, does not seem to have affected conditions greatly, although it may be foreseen that sooner or later the coast of the Bay will be infested by a crowd of traders as was the Mackenzie delta; and if ever a railway is built from Great Slave Lake to Chesterfield Inlet, as has indeed been suggested, it will be the doom of all caribou hunting north of that line, because it will cut right across the path of the great migration. The effects of the great military bases established during and after the last war still remain to be seen. A purposeful and energetic effort is necessary in Canada if its Eskimos are to be enabled to face the future with equanimity.¹

Not until 1949 did the colony of Newfoundland, including the Labrador coast, join the Dominion of Canada. Consequently the history of the Labrador Eskimos differs so much from that of other British Eskimos that it must be discussed separately. By the War of the Spanish Succession Spain's days as a great

¹ For a description of the problems facing the Eskimos of the Canadian Arctic today I refer to the excellent book of Colin Wyat, *North of Sixty*. London, 1958.

power were finally and irrevocably ended, and the power of Louis XIV was shaken to its foundations. In America, France had at the Peace of Utrecht (1713) to cede Nova Scotia to the British and to recognize their supremacy over the Hudson Bay lands and Newfoundland, but retained the right to fish-drying areas on the northern coasts of Newfoundland; indeed, after the Treaty of Versailles seventy years later England had even to undertake to clear the so-called treaty shore of British settlers. Even if this obligation was never put into practice, the conditions on the whole put pressure upon the Newfoundland fishermen who consequently began to move northwards along the Atlantic coast of Labrador. From the middle of the eighteenth century the stretch between Belle Isle Strait and Cape Chidley was – except for a short period – reckoned as part of Newfoundland.

Almost contemporaneous with the incorporation of the coast of Labrador the Moravian United Brethren began their mission among the Eskimos there. It was not unaccompanied by bloodshed, for the Eskimos were accustomed to judge white men by the fishermen they had met, and these men were not of the best. Only in 1764 did Jens Haven succeed in founding the mission that has continued to this very day. While the population was instructed in religion and the ordinary educational subjects, efforts were made to support them economically, first and foremost by taking over the trade and carrying it on in a manner advantageous to the Eskimos. The goods of the mission were exempt from duty, and in the fixing of prices 25 per cent. was added to the cost price of provisions, 50 per cent. to less necessary articles or very perishable goods, and 100 per cent. to articles of luxury. The buying prices of skins were as high as the world market permitted.

Since early days the missions sought from the Government a trade monopoly and a prohibition against foreigners settling in the vicinity of the trading posts, but for many years Newfoundland showed no interest in protecting the native population. No attempt was made to maintain a monopoly and, despite the unselfish and honest endeavours of the Moravians, they were unable to stave off the degenerative influence of the crowd of fishermen and traders who ravish the coast every year. The picture drawn by the former Crown Inspector in North Greenland, Harald Lindow, after his journey along the coast

of Labrador in 1921, was no encouraging one. By offering an insignificant overprice these travelling traders enticed the Eskimos to sell them their goods, and in return sold them valueless and useless rubbish at extortionate prices. On the Eskimo hunting grounds white immigrants have long since settled, the so-called leveyers, who, despite English blood, speech and dress, are in no respect on a higher level than the natives themselves and therefore, without raising their culture, only take the bread out of their mouths. Nor was the natives' struggle for existence made easier by an uncomprehending Government's exaggerated precautions for game preservation; the Eskimos were, for instance, forbidden to shoot caribou at the time of the year when they had most use for them, while they were fined up to \$100 if they killed more than the permitted three head per annum! On the other hand, white sealers, with modern appliances from wireless telegraphy to aeroplanes, are allowed to persecute the flocks of seals on their very breeding ground in the drift ice and kill them by the thousand.

The steady decline in seal hunting has caused the growing importance of cod fishing which is carried out from motor boats (both kayaks and umiaks have been abandoned) while at the same time the ensuing lack of skins and blubber has resulted in poor clothing and insufficiently heated habitations. Besides, there has been a very perceptible fall in prices of the local products and an increasing demand for imported commodities. Under the circumstances the economic status of the population has constantly deteriorated. However, after an interval, from 1926 till 1942, when the Hudson's Bay Company administered the trade, it has now been taken over by the Government on a non-profit basis. Undoubtedly this means a very great advantage to the Eskimos as compared with the methods of the H.B.C., but nevertheless the majority often have to subsist eight or nine months of the year on government relief.

The fatal influence of venereal diseases has probably been greatly exaggerated. Tuberculosis, on the other hand, is so widespread that not many years ago one-fifth of the population suffered from infectious consumption, but thanks to an energetic health campaign these cases are now reduced to about 5 per cent. Other diseases have ravaged the coast, too, the last being influenza in 1918, which in the course of a few days carried off the whole of the population at the largest post, Okak, and two-thirds

at another place. In spite of the present medical facilities it is not surprising that the number of inhabitants has declined rapidly. From about 3,000 at the time when the mission was established it fell to about one-third of that number in seventy years, at which point it remained with fluctuations for about seventy years more. In 1921 there were only 859 left. Since then there was a transient increase, but according to the census of 1946 the number was again reduced to 750. It seems doubtful if it will be possible to preserve this little remnant for the future, the more so after the discovery of the rich uranium deposits at Makkovik in 1955, and it will certainly not be possible unless strict measures are taken by the Canadian Government, which now holds the responsibility.

In Alaska the Eskimos naturally came under the domination of the Russians. The promyshlenniki already mentioned had been allowed to proceed with their unhappy activities unhampered for about forty years and had gradually succeeded not only in breaking the health and strength of the Aleut, but also were in process of destroying the stock of game, before the first real trading company was established with its headquarters at Kodiak. Several competitors soon arrived, and ultimately the rivals were merged in one organization which, by Imperial Ukaz in 1799, received the name of the Russian American Company and a monopoly to farm and trade everywhere north of lat. 55° N., to spread the creed of the Orthodox Church and to extend the Russian empire as far as possible without leading to conflict with other powers. The Aleut were forced to serve a period of three years as sea-otter hunters, while the Pacific Eskimos had merely to pay a tax in furs. Only slowly did the Russians make their way farther north; at Norton Sound the first post was established in 1832, and only after 1848 were annual trading expeditions sent to Kotzebue Sound.

The fur trade was, of course, the pivot on which the activities of the Russians turned. As a consequence of the stubborn resistance of the Tlingit they equipped whole hunting expeditions with teams of Aleutian natives and went southwards along the west coast of America. There is definite evidence that in this manner the Aleut penetrated right down to the Sta. Barbara Islands in southern California, and when the company was later on given the monopoly of the Kurile Islands, between

Japan and Kamchatka, Aleut natives were likewise taken there. There is no doubt that the activities of the company meant a decided improvement in the treatment of the Eskimos. That is not to say that this was irreproachable - that vodka flowed abundantly and the knut did not hang idly on the wall is certain; the Russians were, however, now themselves interested in safeguarding the natives as the fur trade depended upon them. It is an instructive fact that syphilis first reached the Eskimos at Norton Sound in 1866, more than thirty years after the Russians had opened a post there; and the infection did not come from the Russians, but from the American telegraph expedition. Furthermore, on account of the fur trade the company was careful not to interfere with the usual mode of living of the Eskimos more than could be helped. Down to recent times bread, tea and sugar were almost unknown outside the immediate vicinity of the posts. The Russians themselves to a very great extent lived on the country; cattle, for instance, were only introduced to Kodiak in 1850.

On the other hand, the obligation to spread Christianity was taken lightly. It is true that a school was opened at Kodiak as early as 1795, and Greek Orthodox mission stations were gradually established in several places: but, as in Siberia, the most superficial acknowledgement of the new teaching was allowed to be sufficient. While nominally Christians, the few Eskimo survivors in Prince William Sound, for instance, have retained most of their old faith. The only place where Christianity penetrated the life of the people more deeply was on the Aleutians, and there is no doubt that the honour for this is principally due to Veniaminov (famous also as an ethnographer), who worked on these Islands during the ten years after 1824 until he was transferred to Sitka, where he was bishop until 1850.

During the Crimean War the fear that Great Britian would capture her American possessions led Russia to start negotiations for their transfer to the United States. In 1867 the sale was arranged for a sum of \$7,200,000. Since Alaska has since yielded more than forty-four times that amount in gold alone, one might well call this a good stroke of business for America. Only the Eskimos on the mainland of Siberia and a few Aleut on the Commander Islands remained under Russian rule. According to the official census of 1926, there were 1,292 Eskimos and 353 Aleut in U.S.S.R. In 1924 they came under

the care of the so-called Committee of Assistance to the Lesser Nationalities of the North, which was established on the initiative of Professor V. G. Bogoraz, and since 1932 Eskimos are elected to the executive committee of the so-called Chukchi National Territory. Almost all economic enterprises have now been collectivized. The hunting stations of the Government render assistance in providing implements, transport facilities, etc., and have introduced economic collaboration with the Reindeer Chukchi. The importation of alcohol has been prohibited, hospitals have been erected, and there is seven years' compulsory school-teaching with education in the Eskimo language in the two lower classes and in Russian in the following and with access to higher educational establishments afterwards.

To the Eskimos in Alaska the new masters at first did not mean much more than that whisky was substituted for vodka. But even before the sale the whalers had had their eye upon the neighbouring waters; in 1848 the first of them passed Bering Strait, and from 1889 they had their permanent winter base on Herschel Island, west of the mouth of the Mackenzie. All are agreed that these whalers exercised a destructive influence which far exceeded what we know from Davis Strait and Hudson Bay. Law and right disappeared in the wake of the liquor that flowed in streams all along the coast. Stories are still in circulation among the Eskimos of the fantastic orgies, during which they were cheated out of their possessions by the representatives of this high and philanthropic civilization. The women sold themselves, and those who did not do so were sold by their husbands or fathers. Murder was not unknown.

There were left only the miserable dregs of a people ruined and demoralized when at last the United States began an energetic campaign of restoration which has been as rapid as it has been successful. The name that will for all time be remembered in this connexion is that of Dr Sheldon Jackson. The reaction may be dated from 1890, when the Bureau of Education, which is now responsible to the Alaska Native Service in Juneau, began its work. A modest but vigorous and purposeful start was made with the areas that had suffered most, from the Yukon northwards. Schools were established with English as the language of instruction, and the attendance has been compulsory since 1919, so that the whole of the younger generation now both speaks and writes English. Only the

population of the Yukon delta and Nunivak Island, which had never been exposed to much influence from the whalers, has until recent years been allowed to live untouched, so that they are still the most primitive of the Eskimos of Alaska. Incidentally, it is an interesting fact that in the beginning of this century the Kuskokwim Eskimos invented a kind of picture writing on the basis of their graphic art, although of course influenced by European writing.

Education was not, however, the only progress made. Whaling had declined and the once mighty flocks of caribou had thinned out, so that it was vitally necessary to establish new occupations, and the eye naturally fell upon the introduction of tame reindeer. To change a pronouncedly hunting people into herdsmen would seem to be a difficult task, but that transformation which once gradually took place under aboriginal conditions on Siberian soil was successfully achieved by the Americans in Alaska in a very few years. In 1892 the Government bought a small herd of 171 reindeer in Siberia, and Norwegian Lapps were brought in as tutors; in all 1,280 animals were imported up to 1902, and from this modest beginning reindeer breeding at first seemed to be growing to be an economic factor of the greatest importance. The danger to the Eskimos was, of course, that an increasing number of animals would in time pass into the possession of well-to-do trading companies and the Eskimos thus, instead of being independent herd-owners, would be transformed into a menial class. Unfortunately this threat all too soon proved to be well founded, and the years between 1914 and 1939 became a period of growing commercial development of the reindeer industry, involving a gradual decline of the stock in native possession, inadequate care of the herds, and perpetual quarrels owing to the complicated legal provisions. When in 1931 the economic world crisis set in, the commercial concern turned out to be over-capitalized, and at the same time the marketing possibilities deteriorated materially because some of the United States found it profitable to prohibit the import of deer meat on account of their livestock interests. The results were fatal. From more than 700,000 reindeer in 1930, their number dwindled to a mere fraction of that amount in 1939, when the Federal Government purchased all deer which were not owned by natives. Since then conditions have slowly improved. A new

programme has been adopted for transfering the herds to the Eskimos, who may raise a loan of 500-1,000 head on condition of paying them back after five years. In 1949 there was a total of 27,920 deer, 12,350 of which belonged to the Government.

On the Aleutians, where the climate is not very suitable for reindeer, sheep farming has been introduced, and many Eskimos take seasonal employment in the canneries and mining camps, but at the same time the old occupations are still pursued, although the kayaks have been more or less abandoned and the umiaks are provided with out-board motors. The fur-seal hunt is under control, and both sea lions and sea otters are protected.

Orphan homes and hospitals have been established, and the Social Security Act, passed by Congress in 1935, became effective in Alaska in 1937, although actually it is only within the last ten years that Department of Public Welfare representatives have been appointed in the remote villages and the inhabitants made aware of their eligibility. The first social security provided a monthly assistance to people over 65 years of age, but in 1945 Aid to Dependent Children was added, and in 1951, Aid to the Blind. The ADC, however, is based on need and does not automatically become available.

General education – particularly a knowledge of English – and comparatively secure economic conditions seem to have given the Alaskan Eskimos no small amount of independence. At any rate they have till now, with the support of the Government, been able to hold their own against the traders who have come in, so that they are not subjected to the exploitation that was formerly found in Canadian and Newfoundland areas. They have founded co-operative stores, which are under the supervision of the local educational authorities, and, for a small freight charge, can forward their goods by government ships. This maintains prices at a reasonable level, and there is no doubt that the whole system is one the value of which as an educator of the people cannot be too highly appraised. According to the U.S. census of 1950 there were 15,882 Eskimos in Alaska as compared with 13,144 in 1890; the Aleut, whose number in 1890 only reached 1,702, totalled 3,892 in 1950.1

¹ Actually the number of Eskimos may be somewhat greater and that of the Aleut correspondingly smaller. In southern Alaska many Eskimos are wrongly classified as 'Aleut'.

Thus, there has been a considerable advance. The Eskimo language will probably disappear in Alaska; but the people and certain parts of the original culture will certainly maintain themselves indefinitely except on the Pacific coast, where very few are left. There is every reason for extending the most unreserved praise to the American Government for this result, which few had ventured to hope for two generations ago.

On July 3rd, 1721, Hans Egede came to Greenland. With this event was introduced a new era in Arctic history in general, and for Denmark in particular it meant the foundation of the colonization which has continued in Greenland to this day. Hans Egede's object from the beginning was to reinstate the belief in the Gospel among the descendants of the Norsemen of the Middle Ages who, according to the general belief, were still to be found in the country. For good reasons this came to nothing; but instead he threw himself with glowing zeal into the conversion of the Eskimos.

It was the intention that the expenses involved should be covered by trade, and in the course of half a century trading and mission posts were spread over the west coast. The most northerly colony, Upernavik, was established in 1771, and the most southerly, Julianehaab, in 1775. Various companies attempted to carry on the Greenland trade, but suffered heavy losses, so that in 1774 it was taken over by the Danish crown. This made the trade a government monopoly and, according to a Royal Decree of March 18th, 1776, it was forbidden

'to navigate to or trade with the said country Greenland and adjacent islands, places and harbours and the there established colonies and posts, which at the present time extend from the 60th to the 73rd degree of latitude, and any others which hereafter may be established in that country . . .'

The wording is of importance, as we find here appearing the right of Denmark to assert sovereignty over the whole country, and not merely over the stretches colonized at the moment, a right which formed the basis of the judgement pronounced by the International Court in the Hague, 1933, in relation to the controversy between Denmark and Norway concerning the north-east coast of Greenland. When in 1894 the post at Angmagssalik was opened, the whole of the south-eastern coast

was, in accordance with the decree, brought under the monopoly, as a few years later the stretch from lat. 73° to 74½° N. on the west coast followed. The Thule District on the other hand remained outside. In 1909 a private Danish mission station was opened there, and a year later, the trading-post of Thule under the management of Knud Rasmussen; this is the most northerly post in the world and is known as the starting point of the various Thule expeditions, the costs of which have for the most part been defrayed by the profits of the post. Not till 1937, after Knud Rasmussen's death, was it taken over by the Government.

Thus the basis of the Danish colonization of Greenland was trade. Like many European possessions in more southern lands, Greenland was a trading colony, where the products of the native population were exchanged for European goods. The trade, however, had quite a special character. The first period of colonization was one of unfamiliarity with the country, numerous abortive attempts, and more or less chaotic conditions, but as early as 1782 the Royal instructions provided that all measures should aim at the welfare of the Greenlanders, or, as it was expressed in the Act of April 18th, 1925, on the administration of Greenland, 'its objects shall be the improvement of the economic conditions of the Greenland population'. And it must at once be acknowledged that thoughtful care for the well-being of the Greenlanders has almost always dictated the steps the Greenland administration has taken, while the private company which traded with the Polar Eskimos was not behind in this respect. A consequence of this prevailing principle is that all necessaries are sold at very low prices, sometimes actually at a loss, whereas more must be paid for luxuries, whilst comparatively low prices are also given for the Greenland products.

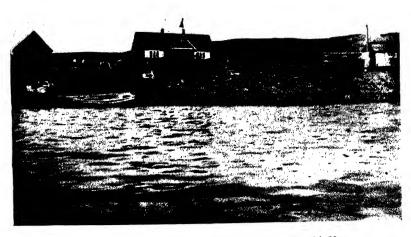
Danish influence upon trade is least marked in the Thule and Angmagssalik Districts, partly because it has functioned there for the shortest time, partly because it has also benefited from almost two hundred years' experience on the west coast. Those products which are necessary to the Eskimos' own existence such as blubber, seal skins, etc., are exported either not at all or else in negligible quantities, and trade is mostly restricted to what might be called luxuries, viz., fox and bear skins, narwhal tusk, etc. On the west coast, however, Danish colonization has penetrated deeply, both directly and indirectly.



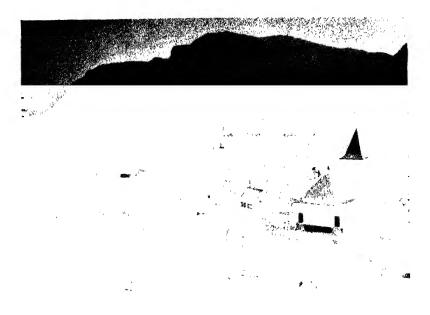
Tame reindeer at Point Barrow, Alaska



Milking scene at Igaliko in South-western Greenland



Thule, formerly the northernmost trading post in the world. Known as the starting-point of the Thule Expeditions



Holsteinsborg. One of the small towns in West Greenland

There blubber and seal skins are also bought up – two articles which are necessary to the original Eskimo culture – while many Euopean foodstuffs such as flour and groats, dried peas, bread, rice, sugar, coffee, tea, etc., are imported. This has, of course, helped to transform the original economic conditions and in some cases led to the Greenlanders selling the blubber and skins for which they really had use themselves, in order to procure the European goods of which they are so fond.

If nothing else had happened, however, this would have been of slight importance and would never of itself have become dangerous, for the Government has on the whole been aware of its responsibility. But there are other consequences of colonization which are far more serious. Rink estimated the annual number of seals caught in 1850 at about 50,000 in North Greenland and 42,000 in South Greenland. Thirty years ago the total for North and South Greenland together varied between a minimum of 75,000 and a maximum of 120,000, or, on an average, about the same figures as in 1850; in the meantime, however, the population has almost doubled, so that there was a very considerable relative decline in the number of seals caught. In 1934 the total had fallen to 68,000, and moreover the number of great seals (saddleback, bladdernose, and barbed seal) had decreased to 22 per cent. of the total in the southern districts, whereas in 1916-17 it amounted to 51 per cent. The cause of this unfortunate change cannot be stated with certainty. It is probably the result of a coincidence of factors, among which some of the most important are the increasing temperature of the sea, the brutal butcheries on the breeding grounds by foreign scalers, and the Greenlanders' increasing fondness for using the rifle instead of the harpoon, a method which not only scares the seals away but also allows many to escape or sink to the bottom of the sea. The buying up of caribou skins similarly resulted in such wholesale butchery about 1840 that in the course of a few years the yield declined at a terrific rate, and the stock of animals suffered a set-back from which it has never recovered in spite of the fact that the caribou are now protected ten months a year. In the same manner thoughtless plundering

¹ By North and South Greenland is here meant the west coast north and south of Nordre Strömfjord. A more copious discussion of Greenland problems is found in *Grønlandsbogen*, ed. Kaj Birket-Smith. 2 vols. København, 1950.

for down and eggs, combined of late years with ardent hunting to supply the needs of the quilt industry, has perceptibly reduced the number of eiderducks. The birds and their eggs are now protected from the middle of May till the middle of September.

It was a principle of the Government that the old national occupation, seal hunting, should continue to be the key industry in the greater part of West Greenland. An exception was only made in two places, Holsteinsborg and Godhavn, where the hope of creating profitable whaling once induced the Government to break with its principle. In the last ten years of the eighteenth century and the first third of the nineteenth century whaling flourished, but then died away. The increasingly perceptible decline among the seals, specially in South Greenland, has, however, made it necessary to look for new occupations in recent years, and the fisheries have naturally been the subject of scientific inquiry and improvement, as they provided an occupation the Eskimos were already familiar with, and which made no great demands of bodily skill. Indeed people who owing to some weakness or other are unable to hunt seals can nevertheless pursue it with profit. Since 1908 a number of pioneer investigations have been made into the biology of the Greenland fishes, and a start has been made on the development of the fisheries by the introduction of improved gear and methods such as long lines, motor-boats, and the appointment of Danish fishermen as tutors to the Greenlanders. On the west coast there are now no fewer than seventy-nine stations for buying, canning and salting fish. The Greenland shark is abundant in many places and is of importance especially at Jakobshavn. Its flesh is only good for dog-feed, but the rich liver yields 50 per cent. of oil. How much the fisheries mean to the modern Greenland community can be understood from the fact that cod fishing in 1955 amounted to 20,986 tons. The rise of the sea temperature, which since 1920 has caused the enormous progress of the cod fisheries, has, on the other hand, resulted in a considerable restriction of the occurrence of the Greenland halibut, which prefers cold water. At the same time the activities of foreign fishermen on the great banks off the coast reduced the population of the ordinary halibut to a minimum. In order to meet the consequences of these unfavourable circumstances, the Government is now successfully working up a canning industry of deep-sea shrimps.

While the fisheries are a further development on the old Eskimo basis, animal husbandry and farming involve a breach with all Eskimo ideas and culture, a revolutionary break with the exclusively destructive hunting economy. It was natural that the eighteenth century, with its live sense of the common welfare, should have also examined the possibilities of cattle breeding in the areas where the Norsemen had had their farms. In 1782 the first three calves were sent up to Julianehaab; this laid the foundations of Danish cattle breeding in this part of Greenland, and a short time afterwards the founder of this colony began the movement which introduced cattle keeping to the Greenlanders: he was married to a Greenland woman and established himself as a cattle breeder at Igaliko, where the episcopal residence of the Norsemen had once stood. In this place his numerous half-breed descendants have since retained this occupation, and it has also been taken up by others here and there. There is great difficulty, however, in getting the owners to look after their animals properly. The cattle are of a small, hardy but not very productive race which is not entirely free from degeneration. During the most severe period of the winter they are kept in the byre; but the Greenlanders anticipate that they will be able to stay out most of the winter and the accumulated fodder is therefore often insufficient. Beyond a little beet cultivation hardly anything is done to procure fodder other than cutting the natural grass. Both nourishing and worthless plants all go together, while ditching, aeration of the soil, and manuring were until recently quite unknown.

Compared with this insignificant and most irrational form of cattle breeding, sheep-farming is much more advanced. The sheep-farming experiment was started on the initiative of the Government in 1906 with a small number of Faroe sheep, and as a consequence of the favourable result the experiment was extended in 1915 with a large number of Icelandic animals. The Government station has been very useful in encouraging the Greenlanders in sheep-farming, for it supplies a number of animals free of charge, on the condition that a similar number are returned after a suitable lapse of time. There are now (1955) about 21,000 sheep in West Greenland, and rational methods for feeding improvements have been introduced.

To form an idea of the future economic possibilities of Greenland it is necessary to differentiate between various regions;

for the natural conditions, which in the original Eskimo culture are an extremely important feature, will not lose their power in the time to come. The Thule and Angmagssalik Districts occupy a special position which has both historical and geographical causes, historical in so far as the inhabitants of these districts display the least modified Eskimo culture, and geographical because they still have the opportunity to continue along the same lines, particularly on account of the expansion possible on the east coast. A number of families were for example moved in 1925 from Angmagssalik to a newly established colony at Scoresby Sound. The Polar and Angmagssalik Eskimos remain in the phase of natural economy. Their production is mainly for the purpose of procuring their own necessities, while surplus and luxuries are sold.

In contrast to these districts there is West Greenland. Geographically, it differs from the others in that there is less opportunity for extending the hunting grounds. On the other hand, the greater part of the population is of higher mental maturity. West Greenland is now faced by a problem to which the question of the rescinding of the government monopoly is subordinate, the really crucial point being the transition from natural economy to money economy, from production intended for local consumption to one designed for wider use. In 1951 a far-reaching step towards the complete abolition of the monopoly was taken, the country being opened to private business apart from the imports of alcohol and cigarettes, but by far the greater part of the trade is still carried out by the Government. Much depends on the extent to which European civilization can make use of the Arctic region. To regulate the development, so that it will be beneficial to the country's own, poor inhabitants will be the fine and responsible task of the Danish nation.

It goes without saying that the more the natural conditions approach those of the temperate zones, the greater the possibilities for the establishment of a European culture. In Arctic West Greenland, properly so called, the country about and north of Disko Bay, production will still be partly based, in the near future at any rate, on the hunting of aquatic mammals, augmented in varying degree by fishing. It is fortunate that in these regions seal hunting has more or less if not altogether kept pace with the growth of the population. It is in the transitional area and the sub-Arctic regions that the problem becomes a

difficult one. The chances of maintaining a purely Eskimo life in these areas dwindle, whereas fishing is increasingly remunerative. There is no doubt that the importance of fishing on the southern west coast will increase, especially if the waters farther away from the shore are fished intensively, and provided that the present climatic amelioration does not turn out to be a transient phenomenon.

But there is an element of danger in basing life on the fisheries alone. The isolated situation of Greenland makes too decisive a specialization dangerous. Agriculture is virtually impossible, and all cereals will always necessarily have to be imported in the future. Whether the fisheries could also pay for the importation of the meat and skins, which are just as necessary as grain in this climate, is more doubtful; for these commodities can scarcely be obtained from other parts of Greenland itself. The encouragement of the fisheries and assistance in the supply of meat are really two sides of the same matter; they cannot be separated. Sheep-farming is capable of playing a much greater part in the occupations of the people, but it can scarcely extend farther north than the Godthaab District. There has been talk of introducing tame reindeer to Greenland, and as a matter of fact it would seem that the stretch just from Godthaab to Disko Bay offers favourable physical conditions for this. The number of caribou killed in the years 1835-45, which came almost exclusively from this particular area, may be put at least as high as 150,000, and was probably nearer 250,000. Since 1952 a modest attempt at reindeer breeding (in 1955 numbering 645 deer) has been carried out in the Godthaab District, but actually a much vaster region is favourable to this new industry. The extensive lands below the margin of the inland ice in the Sukkertoppen and Holsteinborg Districts are known to form a low, steppe-like and hilly country with slight precipitation. The heavy falls of snow which fill the mountain valleys of Scandinavia, and may be a danger to reindeer breeding there, are not found here. Reindeer breeding, carried on only in those places where it was more profitable, would not, of course, compete with sheepfarming.

The first relief fund in the world was established in Greenland as early as 1783. Now, any Greenlander more than 55 years of age who is not able to support himself or his family is

entitled to old age pension. There is also ordinary poor relief, and widows and orphans are assisted. As to sanitary conditions the country is divided into districts, each having a medical officer, a hospital-trained nurse and a hospital. In addition, there are infant homes and sanatoria for the treatment of tuberculosis, and there are also a large number of midwives, who have at least passed a three years' training at the hospitals in Greenland, while 10 per cent. of them have undergone an additional training in Denmark. In order to further hygienic conditions and give easy access to healthy dwellings, loans are made by the Government for the building of new houses.

Education in Greenland corresponds to that of the Danish national system. School attendance is compulsory for children between the ages of seven and fourteen, and there are no illiterates. Continuation schools are erected in four places, one of them specially for girls. According to the Act of 1925 instruction in Danish must now be given everywhere, a policy which is favoured by the Greenlanders themselves. Furthermore, there is a technical school at Holsteinsborg, and the seminary at Godthaab, which had hitherto only served the purpose of training catechists, has been extended in the form of a two-year commercial class for the especial purpose of training young Greenlanders for trade. In addition, the most intelligent are as hitherto given an opportunity of taking another two or three years' grant-aided study in Denmark. In Greenland itself there are two printing offices and four public libraries.

Thus the people living in West Greenland to-day are by no means 'primitive', and it is therefore only reasonable that they should have a fairly considerable voice in the management of their internal affairs. The first step in this direction was taken in 1862-3 when the so-called 'managements' were set up at the suggestion of the Greenlanders' untiring friend and champion, Dr Rink. Until 1950 there were municipal, district and provincial councils. Of the latter there was one for the northern and one for the southern part of West Greenland. The latter shared responsibility in the framing of such regulations as concerned the whole of the Greenland community, and examined and reported upon all proposed laws and ordinances concerning public measures for the province or the whole country. In 1950 the organization of the Government was

centralized. Numerous small municipal councils were combined, the district councils were abolished, and the two provincial councils joined into one; at the same time their powers were considerably extended. Finally, in 1953, the status of Greenland was completely changed. Nominally it has never been a colony, but a dependency, but now it was incorporated into the Kingdom and elects two members to the Danish Folketing.

In his famous essay On Liberty, John Stuart Mill says that the only reason for anyone justly exercising coercion against a member of a civilized community is to prevent him from doing harm to others. A monopoly is always a compulsion. The trading monopoly of the Government has, on the other hand, been of incalculable benefit to the Greenlanders, who themselves recognize this. The position is this, that the Greenlanders are far advanced on many points; they have the first germs of a literature, they have good composers and amateur painters; but economics has never been their strong point, and just there the monopoly has safeguarded them. How their prospects will flower under their new conditions, only the future can tell.

By far the greater number of Eskimos are governed by Denmark and the United States. Greenland's native inhabitants total 24,498 (in 1955, against 14,807 in 1923), that is to say almost the same number as Alaska's Eskimo population, and these two regions each have almost three times as many Eskimos as the British possessions. Denmark and the United States have therefore the greatest interest in the Eskimo question. Between Greenland and Alaska the physical contrasts are as great as they can be in the Arctic, the histories of the two regions have been quite distinct and Danish and American mentalities are not the same. But for these very reasons perhaps they may learn something from each other.

The gigantic struggle of the Western Democracies and the Soviet Union against Nazism, and the enormous development of aviation, have completely changed the prospects of the Arctic and its inhabitants. The temporary occupation by the Japanese of Attu, Kiska and Agattu placed the Aleutians right in the vortex of the war, but the population had even previously been transferred to Juneau in South-eastern Alaska. In Greenland there was very little real fighting, and it was moreover limited to the uninhabited north-east coast. According to the Treaty of April 9th, 1941, the United States acquired permission so

establish a few military bases in Greenland, but they were on purpose placed as far as possible from the settlements, and their influence on the Greenlanders has been practically nil, apart from the fact that the Thule trading post has been moved from Inglefield Bay to Wolstenholme Sound. Far more affecting is the transition to money economy, which is not only changing the pecuniary conditions of the population, but also gives it a fair chance of acquiring European civilization on a national basis. Nobody can foretell the future of the Arctic, it is only certain that, unfortunately, it will not remain the remote and peaceful waste it used to be.

In front of the Cathedral at Rheims stands one of the most beautiful works in Gothic art, the statue of a king. The gaze under the calm brows seems to delve searchingly into the thoughts of the observer, the fingers of the left hand still linger hesitatingly on the cord of the cape, but the right hand is already outstretched in firm decision. Let this be a symbol of the relation of the white race to the Eskimos – in Greenland, in Alaska, everywhere.

Appendices

I. SUMMARY OF ESKIMO TRIBAL GROUPS

As stated on p. 144, the unit which may be regarded as a tribe is to a certain degree arbitrary, as a tribe has a purely geographical, but never a political character. The following groups may, however, be regarded as the most important (the spelling of the names in Asia is uncertain):

- 1. Aleut: Atka on Andreanov, Rat and Near Islands, Unalaska on the Alaska Peninsula up to Cape Stroganov on the north side and Pavlov Bay on the south side, as well as on Fox and Shumagin Islands. A number of Aleut were carried by the Russians to the north-east point of Kodiak and the opposite coast of the mainland.
- 2. Pacific Eskimos: Palágvirmiut, Nutjirmiut, Alukarmiut, Atjarmiut, Tatitlarmiut, Kangîrtlurmiut, Tjanirmiut, Shuqlurmiut, all at Prince William Sound and collectively known as 'Chugach'; the first-mentioned tribe also occupied the coast east of the Sound as far as Controller Bay. Qiqertarmiut ('Koniagi', probably several local groups) on Kodiak and the opposite mainland coast.
- 3. Asiatic Eskimos (Yuit, 'Namollo'): Nookalit at Cape Dezhnev. Aiwanat at Cape Chukotsk. Wuteelit at Cape Ulakhpen. Siorarmiut (Eiwhuelit) on St. Lawrence Island.
- 4. Bering Sea Eskimos: Aglemiut and Nushagagmiut on Bristol Bay. Kuskokwigmiut by the lower Kuskokwim. Nunîvagmiut on Nunivak Island and the opposite mainland coast. Kaialigmiut and Magemiut in the delta of the Kuskokwim and Yukon, Kuigpágmiut (Ikogmiut) by the lower Yukon. Unaligmiut by Norton Sound.
- 5. Nunamiut (North Alaskan Inland Eskimos): Kûvagmiut at Kobuk River. Nunatâgmiut at Noatak River. Kangianermiut at Colville River. Utorgarmiut at Otukak River.
- 6. North Alaskan Coast Eskimos: Ungalardlermiut and Qaviasâmiut by Norton Sound. Malemiut by Kotzebue Sound. Tikerarmiut at Point Hope. Kûgmiut near Wainwright Inlet. Utqiarfingmiut at Cape Smyth. Nuvungmiut at Point Barrow.
- 7. Mackenzie Eskimos: Qiqertarmiut about Herschel Island. Kūg-pagmiut at the Mackenzie mouth. Kitikārjumiut in Liverpool Bay.
- 8. Copper Eskimos: Kangerjuatjiarmiut at Minto Inlet; Kangerjuarmiut at Prince Albert Sound. Piuvlermiut (Ahungagungârmiut) at Dolphin and Union Strait. Nuvungmiut at Cape Krusenstern. Nagjugtôrmiut, Kidlinermiut, Qorlortôrmiut and Agiarmiut at Coronation

- Gulf. Eqalugtôrmiut at Dease Strait. Umingmagtôrmiut on Kent Peninsula. Ahiarmiut at Queen Maud Gulf.
- 9. Netsilik Eskimos: Ilivilermiut (Ugjulingmiut) on Adelaide Peninsula. Utkuhigjalingmiut at lower Back River. Qeqertarmiut on King William Island. Netsilingmiut on Boothia Isthmus. Avertôrmiut at Bellot Strait. Arviligjuarmiut at Pelly Bay.
- 10. Caribou Eskimos: Qaernermiut ('Kinipetu') at Baker Lake and Chesterfield Inlet. Hauneqtôrmiut in Ranken Inlet. Harvaqtôrmiut at lower Kazan River. Pâdlimiut south of the latter as far as the timber line.
- 11. Iglulik Eskimos: Aivilingmiut at Repulse Bay and Roe's Welcome, now on Southampton Island as well. Iglulingmiut on the east coast of Melville Peninsula and at Fury and Hecla Strait. Tununermiut at Pond's Inlet.
- 12. Southampton Eskimos: Sadlermiut on Southampton Island; extinct 1903.
- 13. South Baffinlanders: Akudnirmiut at Home Bay. Oqumiut at Cumberland Sound. Nugumiut at Frobisher Bay. Akuliarmiut and Sikosuilarmiut on the north side of Hudson Strait.
- 14. Labrador Eskimos: Serqinermiut on the Atlantic coast. Tarrarmiut on the south side of Hudson Strait. Itivermiut on the east coast of Hudson Bay.
- 15. Polar Eskimos: North-west coast of Greenland from Humboldt Glacier to the northern part of Melville Bay. The local groups here are not separate tribes.
- 16. West Greenlanders: Greenland's west coast between Melville Bay and Cape Farewell. There is a great number of local groups, but if any tribal feeling has formerly existed, it has entirely disappeared by now.
- 17. East Greenlanders: Angmagssalingmiut at Angmagssalik Fjord, whence a number were taken to the new station at Scoresby Sound, 1925. The population on Frederik VI Coast immigrated to the southern west coast during the nineteenth century.

II. RULES OF PRONUNCIATION

The spelling of the Eskimo words has been kept closely to the official, Greenland, orthography with the changes caused by an another pronunciation where necessary. The most important rules of pronunciation are: the vowels almost as in Italian or German; but a short a before a consonant has a sound like the vowel in English 'hat'; k, t and p at the beginning of a syllable are pronounced with faint aspiration, almost as in French; q = a k pronounced with the uvula, almost like rk in English, not in American pronunciation;

dl or tl = unvoiced 1; gg = ch in 'ich'; rr = German ch in 'ach'; j = Italian or German j, English y; ng = ng in 'long', never as in 'longer', gj and tj are palatalized. The length of the sounds, which is of utmost importance to the understanding of the words, is expressed by a sign over the vowels, ^ meaning a long vowel, ' that the following consonant is long, and \sim that both vowel and the following consonant are long.

On the particular West Greenland assimilation of sound-groups, see p. 58 f.

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